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Thesis

THE MEASUREMENT OF PERSONALITY INCLUDING A DESCRIPTION AND EVALUATION OF CERTAIN TESTS OF PERSONALITY AND CHARACTER.

Submitted by

Laurence Danforth.

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CHAPTER I.

THE HISTORICAL APPROACH.

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THE HISTORICAL APPROACH.

Introduction. Personality is a complex thing and its measurement is difficult. Yet ever since Thorndike made the statement, now accepted by all sane persons as a truism, that "whatever exists at all exists in some amount."[1], its practical implication has been that anything that exists in amount can be measured. It is almost universally agreed that intelligence is a major factor in the composition of personality. Today the measurement of intelligence is a firmly established procedure and its results are at least fairly satisfactory.

But even when a person's intelligence has been measured we have by no means a complete analysis or measurement of his character, nor can we predict his behavior or decide his fitness for a given position. Our picture of his personality is incomplete. Rugg said, in 1924, "It has been clear for some time that we need to recognize that verbal intelligence represents only one-fifth or one-sixth or one-eighth of human personality. The objective measurement of character traits will further our proper orientation."[2]

1 Thorndike, E.L., The Seventeenth Year Book of the National Society for the Study of Education, Part II, p. 16 Public School Publishing Co., Bloomington, Ill.

2 Rugg, O., How Shall We Measure the Dynamic Traits. p. 60. Journal of Educational Psychology, Vol.15, 1924.

Doubtless we are not to suppose that he meant exactly a fifth or sixth or eighth, nor did he mean to imply that all the rest of personality may be described in terms of character traits. The point is that the major emphasis in the field of measuring personality must now lie outside of the realm of pure intelligence tests.

For this reason, and because the literature on intelligence and its measurement is in itself voluminous and accessible, the whole area of the measurement of intelligence has not been touched in this thesis.

This is rather an attempt to describe and evaluate certain tests of the non-intellectual elements of personality. In 1924 it was possible for Symonds to say: "Despite the recognized importance of personality there has been no attempt, so far as the author is aware, to analyze it into its constituent factors."[1] But now it is almost impossible to find a personality trait that has at least adjectival existence that has not been approached for the purpose of measurement. While the total number of available tests is inadequate, there are too many to be described, let alone evaluated, within the limits of this work. Therefore,

1 Symonds, P.M., "The Present Status of Character Measurement." page 484

a group of tests representing differences in technique and purpose has been chosen with the thought that they are characteristic of what is being done in the field and that the case for or against such tests may be judged on the merits of the samples chosen.

Nowadays everyone stresses the importance of background. The historical approach is much sought after and sometimes without justification. But in this case it seems almost imperative to sketch the historical schemes and theories related to the analysis and crude measurement of personality and then to lay out a bird's-eye-view of contemporary methods of regarding character and personality.

Early Records. The earliest students of personality did not make any serious attempt to discriminate between personality, character and temperament. This confusion has lasted until the present time and it is not an easy task to make distinctions today. It is still more difficult to get supposedly competent judges to agree to such distinctions when they have been tentatively formulated. We can not afford to be too critical of the primitive attempts in the matter. We should rather give credit for what was accomplished realizing that,

as Roback said of Francis Bacon, "After all, it takes a practical mind to discern that there is such a problem as cataloging individuals."[1]

It would be difficult to find a more comprehensive compilation of early writings on character, personality and temperament than that produced by Roback in "The Psychology of Character", Sections I, II, III, and it deserves to be read critically in this connection. According to him, the study of personality or character became "articulate" in the Greek culture of the third Christian century. Then commenced a two-fold approach which has continued with modifications until the present. On the one hand, the literary method is an attempt to analyze and classify types of character. Traces of such a method may be discerned in the wisdom literature of the Hebrews, in the dialogues of Plato and the writings of Aristotle. It blossomed forth in a well-defined manner in the sketches of Theophrastus, the pupil and successor of Aristotle. A parallel current of character research was the semi or pseudo-scientific humoral theory of temperament which has eventuated in the modern views on endocrinology in relation to personality. Hippocrates was apparently the author of this theory. His work was modified a few centuries later by Galen. In a large measure their work

1 Roback, A.A. The Psychology of Character, page 139.

has since withstood the test of time.

The two methods were followed blindly without any attempt at synthesis. Apparently no one thought deeply enough to see that temperament concerned man's affective nature while character concerned itself with a universe of conduct and that both were part of the wholeof personality. Literary characterologists adopted the method of labeling modes of behavior in accordance with the way they affect observers and then describing the effects of such behavior. This method had obvious limitations for the behavior classes are at one and the same time incomplete, arbitrary and overlapping.

Literary Contributions

Chaucer was probably the first English sketcher of traits; Ben Johson tackled characterology; but Bishop Earle[1] is far more psychological than any other British literary writer and may be favorably compared with Theophrastus, being truly analytic and comprehensive. Character writing in France flourished but was radically different from British attempts. English writers expressed their own emotions more

1 Earle, John Mirocosmographie, 1628.

perfectly than they described universal traits. French writers apparently had a more serious purpose and sought common elements of character discoverable in folk of all nations. The English examined the individual; the French portrayed the type.

In the long run literary characterology provides us merely with clues. Its guiding purpose is the desire to do a polished piece of writing rather than the effort to analyze the subject completely. Writers multiplied type on type, making distinctions where there are none. It is more truly the case, Roback thinks that "character should function as a sort of law under which a large number of individuals might be subsumed as particular instances."[1]

Humoral Theories. Meanwhile, the explanation of Hippocrates and Galen was still widely current. Galen revised the humoral theory to include nine temperaments founded upon the four humors - gall, bile, phelgm, and blood. It was credibly supposed that an exact balance of the four primary humors made for normality in temperament. The humoral doctrine has a history that runs closely parallel to all human ideas. Alchemy, mysticism, and science have at times adopted it. When Harvey discovered the truth about the

1 Roback, A.A. The Psychology of Character. p. 39

circulation of the blood, emphasis shifted from the composition of the blood and centered upon its movement as a determinant of temperamental differences. Physics, chemistry, pathology, physiology and neurology - all dally with the doctrine. Then philosophy took its turn and Platner, a contemporary of Immanuel Kant, sought out the psychological ingredients of temperament and introduced value denominations for them. Kant, in the Anthropologie, treats the temperaments more critically and writes of character in both senses - as moral make-up and as distinguishing features.

From Kant, the doctrine passed into the hands of phrenologists and under their tender mercies was applied as a science of brain localization with reference to abilities and disabilities. They had a really tremendous following. Throughout the eighteenth century the phrenological and constitutional or systemic bases of temperament were mutually influential.

Nineteenth Century Writings on Temperament. German writers on temperament led the field in the nineteenth century for the French failed to differentiate clearly between character and temperament and the British made no systematic attempt to

study the subject. For a time the leading German students were chemists, anatomists and physiologists but toward 1860, the matter was again transferred to psychology and philosophy where it rightfully belonged.

Today, many approaches to the study of personality are offered, all of which make a definite contribution, as the next chapter will show.

CHAPTER II.

CONTEMPORARY VIEWS OF CHARACTER AND PERSONALITY.

CHAPTER II.

CONTEMPORARY VIEWS OF CHARACTER AND PERSONALITY [1]

A. APPROACHES.

Psychiatry

If we are correct in assuming that the difference between normal and abnormal personality is a difference of degree rather than a qualitative one, [2] psychiatry presents data that throws much light upon some of the more obscure elements of personality. At any rate, psychiatry has transferred the study from academic precincts into the realms of everyday life in all its complexity and psychologists now recognize the results of clinical observation as invaluable. Psychiatry and abnormal psychology are now in an alliance that is mutually helpful and fruitful. For some time it has been difficult for psychiatrists to agree as to what is the common nucleus of their subject - the treatment of nervous and mental disorders. Psychology must demand chiefly from psychiatry that its classification of personalities avoid conflict with established evidence until new data, definitely contradicting those already thought certain, are found.

1 Roback, A.A. The Psychology of Character, Part III.
2 Roback, A. A. Ibid, page 263 and 516.
Vaughan, W. F. The Lure of Superiority, page 151-52.
Gates, A. I. Psychology for Students of Education, page 398. New York, MacMillan, 1925.

Psychoanalysis

Psychology and psychiatry make joint contributions to the investigations that have given rise to the psychoanalysis of Freud and his followers. The latter study has had the beneficial effect of making folk realize that there is a great deal more involved in the study of personality than traditional psychology demonstrated. Freud's exaggeration of the place of sex yields value when seen in a sane light. Jung's dichotomic division of humanity into introvert and extrovert types reveals two important personality trends and suggests not only their self-exclusive nature but their blending in the majority of humans. Adler's doctrine of compensation is to be mentioned in a moment.

The Freudian or psychoanalytic mechanisms are too well known to make their description necessary here. Fixations, regressions, projections, transferences, condensations, conversions, displacements, repressions and complexes are becoming commonplace terms in the thought and speech of the adult generation today.

Insofar as psychoanalytic conclusions agree with the facts of experience, they should be endorsed. In so far as they

are fantastic and incoherent they must be rejected. In its whole system of thought, psychoanalysis warns education that opportunity for normal emotional and instinctive reactions may be repressed at the risk of developing pathological personalities.[1]

Compensation.[2] Compensation, says Adler, is the attempt of the individual to overcome an (organic) inferiority in a direct or indirect fashion. It is a function of the individual volitional make-up and on that account we ought to be prepared to see it manifest itself differently in various individuals, even if the external circumstances are almost identical. It is an unconscious, or better, a subconscious mechanism. In this respect it becomes a liability for we can never be sure how it will manifest itself. Compensation is a good explanation of apparently contradictory behavior, of inconsistencies that we might brand as caprice or hypocrisy. It is an extremely subtle mechanism and for that reason we can never predict just in what form it is likely to occur. Indeed, we can never be quite sure that we can positively label a case of compensation in any given instance. Compensation involves the logical contrast observed in the association of ideas and applied uncritically, results in obviously wrong conclusions. It is pleasant to think that a person who is overtly cruel is

1 Burnham, W. The Normal Mind, page 15, N.Y., Appleton, 1925.
2 Vaughan, W. F. The Lure of Superiority, Chapter I.

really hiding a tender heart but does that mean that a truly saintly soul is, in reality, a harsh and vicious person? The suggestion we all tend to reject and it would seem that the organism does not tend to compensate unless it be to its own advantage and since kindness and generosity are in themselves socially advantageous, no compensation is necessary.

The Struktur Psychology. Gestalt. Gestalt psychology[1] is a German movement that is now popular in America is a result of the effort to treat mental experience as a whole rather than as a set of elements, artificial in nature. It is essentially an experimental movement and concerns itself mainly with the study of perception[2] in an effort to explain the relationships existing between unitary patterns of experience known as Gestalten or configurations and their background or backgrounds. It "posits certain structural patterns or configurations, such as (in the case of an infant) the mother's face, the bottle, or a baby basket against a more or less blank uniform background supplied by the infant. By the interaction between it (the background) and these structural patterns[3], life takes on meaning and begins to be organized."

The tendency to see the part in the light of the whole is allied to the present relativity movement in physics. It appears to

1 Roback, A. A. Popular Psychology, Cambridge, Science-Art, 1928 p. 247.

2 Koehler, W. An Aspect of Gestalt Psychology, page 163-195, Psychologies of 1925. Worcester Clark Univ. Press.

3 Boorman, W.R. Developing Personality in Boys, , N.Y., MacMillan, 1929. p. 22.

be wholesome only suffering from a general tendency to be misunderstood by American psychologists. Its logical contribution to the measurement movement is an imperative to measure the unity of personality as well as the sum total.

Endocrinology - Humors and Hormones. Endocrinology dwells in the borderland between physiology and psychology. The thesis of its enthusiastic adherents is that an individual's personality is regulated by his glands. It is no doubt true that our personalities are, in some degree, affected by the functioning of our ductless glands but we cannot rest content with such an explanation for all of personality. As Valentine says: "The influences arising from gland activities can but predispose the individual, fatefully at times, no doubt, in his habit formation or affect the vigor of his reactions. The glands do not distill essences of personality."[1] Nevertheless, life is influenced by chemical substances produced in the act of living and there are life and death values in the endocrine glands.

Galloway[2] concludes that it has been sufficiently well established that the endocrine solutions modify growth and normality and that the inheritance of the tendency to over or undersecretion has an effect on a person's physique and temperament.

1 Valentine, P.F. Psychology of Personality, page 170.
2 Galloway, T. W. Chemistry and Character, Journal Ed. Psych. Vol. 13, page 303-306.

Excessive or deficient secretions cannsometimes be artificially adjusted to a normal volume and so personality may sometimes be altered for the influence of the glands produces variations in many of the qualities which we describe as part of personality.[1]

Psychography. Psychography attempts to measure and explain personality by making a qualitative and quantative record of a person's reactions under all sorts of conditicns. Such a record is often recorded graphically on a chart like the one prepared by G. W. Allport[2] in which the qualitative aspects of personality are placed on a linear continuum. The quantitative measurement of each of the qualitative components in then recorded on a vertical scale. (If he represented qualities by a, b, c, d, e, etc. and the autntities in which they were found by numbers from one to ten then one personality might be represented as 62+4b+9c+2d+5e and another as 3a+7b+2c+6d+9e.

As Roback presents Allport's chart[3] he endorses its method of construction but attacks the author's selection of components of personality, implying that their qualitative differentiation is not keen enough. Allport has not selected

1 See also, Berman, L. The Glands Regulating Personality, N.Y. MacMillan, 1922.
2 Roback, A.A. Op. Cit, page 426.
3 Roback, A. A. Op. Cit, 428

a large number of separate traits but rather what he considers an adequate number of major personality components and Roback points out that it is very difficult to criticize and evaluate traits like social participation or "sociality". A "good mixer" possesses sociality and social participation of a different quality from that of an extreme individualist who has an alert social consciousness and is an earnest worker for a better social order through the power of his pen and the press. This is a single statement of the criticism directed against traits and is not unanswerable as the writer hopes to show in Chapter Five. In itself, it does not invalidate the psychographical method.

Psychographical ratings may be self-ratings, ratings by a single observer or ratings by a group of judges. The validity of such ratings is discussed at some length in the section beginning on page 49 and is therefore passed over here.

Rational inhibitionism.[1] This is a theory proposed by Roback as his explanation of character rather than of personality in its entirety but since character, as he conceives it, is a dominant aspect of personality, it is worthy of at least brief description for the light it will throw upon the problem of personality.[2] Roback defines character

1 Roback, A. A. Op. Cit.- entirety
2 Roback, A. A. Op. Cit, page 450.

from the standpoint of his theory as: "an enduring psycho-physical disposition to inhibit instinctive impulses in accordance with a regulative principle."[1] This means: (1) that we must grant the existence of at least some instincts as part of man's innate equipment; (2) that these instincts are capable of being inhibited, and further; (3) that such inhibition must be in accordance with some guiding principle. From this point of view inhibition becomes a positive rather than a negative force and then the only true way to measure character is to measure the amount of force it takes to inhibit impulses in obedience to some principle. Character becomes the product of the interaction of reason and instinct.

Experimental Approach. American experimental tests of personality have been and are still largely, directed toward the measurement of "sections" of personal life known as traits - i.e., honesty, thrift, cooperativeness and the like. Roback[2] denies that many of these tests are valid, claiming that they do not measure what they purport to measure. This is the fault not so much of test construction, although it is perfectly true that more than one test, like a test of ethical discrimination, has turned out

1 Roback, A. A. Psychology of Character, page 447 et. seq.
2 Ibid, pages 354 et. seq.

to be a mere test of intelligence, but of the failure of the attempt to isolate traits that actually exist. Trait names have a tendency to represent a quantity or quality that is too inclusive and general or else to name something that does not actually exist. In both cases, measurement obviously would not be successful.

B. THE PSYCHOLOGICAL NATURE OF PERSONALITY, CHARACTER AND TEMPERAMENT.

Personality Defined. Experts disagree as to the essential nature of personality. It is apparently a term that has been carelessly used so long that it is difficult to reach any common conclusion as to what it includes. Both as a term and an entity, it includes more than what is commonly called character and if there is any approach to agreement among students and thoughtful persons who have attempted its definition, it may be regarded as the entire human organism working together as a unit.. Valentine[1] compares it to a compound like attar of roses adding that it is a "thousand times more complex". For it is no single essence. Every separate aspect of it is an essence drawn from preceding sources and processes as intricate as those of the attar. And every separate aspect is interlocked with every other aspect."

Some writers have conceived personality in the way Dr. Morton Prince did, as: "The sum total of all the biological innate dispositions,

1 Valentine P.F., Psychology of Personality, page 356.

impulses, tendencies, appetites, and instincts of the individual and of all the acquired dispositions and tendencies. It would seem then that the personality is the reservoir of elements.."[1]

Roback[2] takes the position that personality is an integrated total of the cognitive, affective, conative and physical tendencies of an individual. He distinguishes two manifestations or types of personality, the external and the invisible. The external is mainly the physical impression we make on others and is relatively unimportant when compared with the internal personality.

It is to be expected that behaviorism would frame its own concept of personality. Watson[3] agrees that personality is broader than character in that it includes not only a person's reactions to somewhat standardized and conventionalized situations like customs and conventions but also adjustments and capacities that are more intimate and personal and associated with the individual through his whole life history. The behaviorist is handicapped, as he attempts to understand personality, by the limitations of

1 Prince, M. The Unconscious, page 532. quoted in Roback, p. 157.
2 Roback, A.A. The Psychology of Character, page 159.
3 Watson, J.B. Psychology From the Standpoint of a Behaviorist. p. 396.

his psychological methods.[1] Roback charges him with transgressing into the field of psycho-analysis by attributing the reactions by which we might estimate personality to the operation, first, of a habit of awe acquired in our childhood under the impression of authority, and, secondly, of sex, which is responsible for judgments that a man or woman has an "engrossing", "thrilling", or "pleasing" personality. However the externally pleasing aspect of personality is not its essential feature. If respect is built upon any true basis, it is due to an appreciation of certain superior qualities. Valentine puts it something like this, in writing of the relation between personality and behavior:[2] "It (behavior) is but the observable aspect of that continuous interaction which both gives rise to and is personality."

Troland attempts to give an accurate description of the physiological laws of personality, explaining it in terms of our inherited equipment and our environment.[3] He says that we are all equipped with an hereditary endowment of reflex, retroflex and other less differentiated nervous

1 Roback, A. Ibid, page 353.
2 Valentine, C.W. Psychology of Personality, page 13.
3 Troland, L.T. The Fundamentals of Human Motivation, page 465.

mechanisms, such as the cortex, all of which may vary in quantity upon a purely genetic basis. Environment operates upon this equipment and we develop in four different ways. First, the cortex receives afferent impressions from the specific stimuli. Secondly, afferent combinations are related to efferent innervations to produce certain muscular reactions. Thirdly, another type of specific linkage produces conditioned retroflexes. Fourthly, a still different type of innervation forms conditioned reflexes.

This explanation is interesting and of value if it can be experimentally established as the true one. But, after all, it cannot possibly tell us any more than how personality works and not what it is. It implies that personality is merely the reaction of four types of environmental reaction, assumed to be all inclusive, on an individual's hereditary equipment. It is neither adequate nor illuminating.

Maurice Parmelee[1] identifies personality with self-consciousness, which he calls "the sense of personality". He points out how self-consciousness is based upon more or less

1 Parmelee, Maurice - The Science of Human Behavior, page 307 et. seq. N. Y.: MacMillan, 1913.

permanent, i.e., intermittent and transcendent, psychic elements and makes this permanence an essential feature of personality. For him personality is not innate but acquired as the result of the integration of psychic elements.

Coffin[1] says that for the man in the street, at least, personality "consists of a group of qualities or characteristics" and then goes on to enumerate some such as appearance, speech, habits, conduct, gestures, etc. He does not feel that there[2] are any objective standards or tests of personality but rather that a person has imagination, good judgment, taste, tact, sympathy, ideals, purposes, tolerance, open-mindedness, reverence, distinction, and sociableness.

P. M. Symonds of Columbia University writes in his "Nature of Conduct", page 286, to say that in personality we are essentially concerned with the interactions of strong and weak points in a person's make-up. In this sense it is partly a matter of education and in part innate. In life experience, our behavior is likely to be split up into complexes that alternate and conflict

1 Coffin, The Problem of Personality. p. 15
2 Coffin, Ibid , page 238

often resulting in definable and describable behavior patterns.

Although, from a purely behavioristic viewpoint, there is nothing to a person except bones, muscle, flesh, and habits, there are certain peculiar qualities that characterize an individual and come to be known and discussed independently of the physical acts or attitudes that reveal them. They are inseparable from their physical expression but they are more than a totality of all traits, habits, and adjustment or conduct patterns. They are the elements that make up loveliness and attractiveness in personality and are often referred to as spiritual factors. A person is more than a collection of behavior patterns and reactions to stimuli. His habits and attitudes are organized around desires, purposes, and ideals that give unity to his life and make him an entity that has intrinsic worth.

Personality appears to be the most inclusive term we can use with reference to either human structure or behavior.[1] Allport believes it to be preeminently the social aspect of the individual. It is probably best regarded as the sum total of all innate and acquired human factors governed by the fundamental drives of human nature, modified in accordance with accepted and desired standards of personal and social living.

Character Character is best viewed as an integral part of personality. Roback points out that there are at least three divergent views of its nature. In the first

1 Allport , F. H. Social Psychology, Chapters, V, VI.

place, it is sometimes regarded as the sum of all the qualities in regard to which human beings differ, even including traits of intelligence. This is a rather extreme position. Fernald proposed as an alternative that it be regarded as equivalent to personality minus the intelligence component. Character, according to the third view (Morton Prince, How Many Selves Have We? page 270) is the manifest or overt personality, i. e., those personality traits which predominate and characterize the personality at various moments. Character here turns out to be a variant of personality.

Valentine[1] tries to analyze character and resolves it into the elements of courage, determination, will and resistance to the continual and petty temptations of life. This analysis does not have the merit of being patently exhaustive; neither is it at all clear just what "courage", "will", and the like include.

Watson[2] places character on the plain of mere reaction to the stimulations of everyday life. Symonds[3] is a confirmed behaviorist and an opponent of the theory

1 Valentine, P.E. Psychology of Personality, page 175 et. seq.
2 Watson, J.B. Psychology from the Standpoint of a Behaviorist. page 392.
3 Symonds, P.M. Nature of Conduct, page 288

that character proceeds from within, out. He says that Dewey and others (among them Roback, as we shall see in a moment) proceed on the assumption that character is an outward phenomenon of an internal disposition. He attributes this merely to the readiness or unreadiness of the synaptic processes to operate. He holds that a synapse always presents a certain state of resistance which from the standpoint of behavior is either readiness or unreadiness to respond. Each response has an accompanying feeling tone which corresponds to the preliminary state of readiness or unreadiness. This tone is what is commonly and mistakenly called an emotion or value feeling by adherents of the theory that character is inherent.

Roback[1] attacks this notion with conviction and dismisses the idea that character is a relation that exists between a man and his physical and social environment, feeling rather that it is a relation between his reason and his actions. It is more than a habit, he says, for it is a system of tendencies which permits of a considerable degree of predictability. Stated in negative terms, it is what remains after cognitive, affective and physical qualities

1 Roback, A.A. Op. Cit., page 347

have been abstracted from personality. Roback further says: "I should take occasion to point out that since different people are affected differently by apparently similar stimuli, it would be reasonable to maintain that character in reality precedes and determines the nature of the effect, instead of being the resultant of the multidue of experiences to which man is subjected."[1]

It is fairly evident that general opinion classifies character as a part of personality although there is by no means unanimity of opinion as to the relative part it is of the whole. But there is a decided variance expressed as to its essential nature and it depends upon ones' educational philosophy as to whether one says that character determines behavior or behavior determines character.

Temperament — Roback[2] further believes that it is the consensus of opinion that neither intelligence nor volitional qualities enter into the temperament make-up of an individual. It appears to him to be the "sum total of one's affective qualities as they impress others". These affective qualities are innate and generally classified into

1 Roback, A.A. Ibid, page 302.
2 Roback, A.A. Ibid, page 155-156.

the four groups; the melancholic, characterized by a sad undercurrent of life; the sanguine, dominated largely by hope and enthusiasm; the choleric in which the anger response is very easily induced; and the phlegmatic with a very weak emotional flow which requires strong stimulation before action and emotion unite.

Jastrow[1] refers to temperament as the basis upon which all character is built, believing that it is of the nature of native emotional endowment which limits character. Temperament is essentially biological, affecting character in action and personality.

Summary of personality, character, and temperament. Personality, let it be repeated, appears to be the most inclusive term we can use with reference to human nature. It may be described quantiatively and qualitatively but may not be adequately measured by the description of personality traits seen as isolated units of behavior. It is expressed in human society through the medium of a biological organism known as the human body which is subject to apparently innate affective tones known collectively as temperament. The temperamental make-up of an individual personality is not subject to radical alteration throughout life.

1 Jastrow, J. Character and Temperament.

Personality exhibits an important variant known as character which is usually thought of either as a resultant or controlling factor in behavior. Daily life presents sufficient evidence to make the latter view tenable.

A true conception of personality must be dynamic rather than static. Personality may be truly described only when the activity and organization of an individual's thought life, appreciations, drives, inheritance, attitudes, ideals, and efficiency are considered.[1]

C. PERSONALITY - ITS COMPOSITION.

Common and uncritical estimates of personality are made on what is commonly called the "lump judgment" plan where a general impression favoring or condemning a person passes for a valid judgment. Proponents of scientific measurement feel that more truly valid and accurate results are obtained by breaking up personality into many specific and significant traits, measuring each and so obtaining a composite measurement or judgment. It is true that opponents of this method point out that personality is not exhausted by an enumeration of its parts and therefore they agree that it cannot be adequately measured

1 Coffin, J. H. Personality in the Making, page 87.

by any scheme of part-measurement, no matter how complete. Whether or not this be true it is undoubtedly true that the analysis of personality into some of its constituent parts results more favorably toward an understanding of it than any lump and uncritical judgment, for human beings are so constituted that lump judments are notoriously incorrect.[1]

Systematic Observation. Frederick Lyman Wells of the Boston Psychopathic Hospital,[2] has taken the position that personality is in reality a direct and permanent personal adjustment to one's environment and for the purpose of gaugeing personality, he has attempted to make a systematic outline of the factors involved in the adjustment. This outline we may call an analysis of personality. He first established fourteen adjustment types or phases of personal adjustment to environment and then in order to make these more specific, further subdivided them into ninety-four

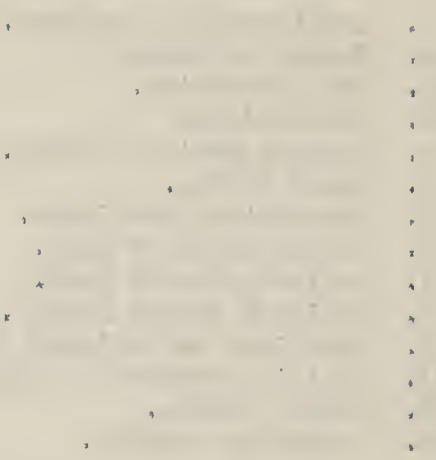
1 Wells, F. L. "The Systematic Observation of the Personality in Relation to the Hygiene of Mind, page 296-333.
2 Watson, G. Journal of Educational Psychology, Vol. 18, 1927 page 83.

personality traits, all of which are subject to quantitative measurement, the method he used being that of judgment by relative position, comparing one subject to other individuals. His fourteen adjustment types are given below and the whole schema is presented for reference in Appendix A.

I. Intellectual Processes.
II. Output of Energy
III. Self Assertion.
IV. Adaptability
V. General Habits of Work.
VI. Moral Sphere.
VII. Recreative Activities.
VIII. General Cast of Mood.
IX. Attitude Toward Self.
X. Attitude Toward Others.
XI. Reactions to Attitude Toward Self and Others.
XII. Position Towards Reality.
XIII. Sexual Sphere.
XIV. Balancing Factors.

Wells is perfectly aware that when he presents his ninety-four traits, critics will say that they overlap and are not units in themselves. He presents that argument himself when he says that:"No single characteristic can be absolutely separated from other characteristics any more than a single act is the product of a single motive."[1] But his pretension is that this fact, if recognized, does not totally invalidate methods of analysis such as his.

1 Wells,Op.Cit.,page 298.



He goes to some trouble to show the signi - ficance of the elements of his analytical scheme as an approach to the understanding of personality, showing that in the intellectual realm, for instance, the degree of mental imagery is an exceedingly important clue. Personality is measured in a degree by the extent to which a person is adaptable. Education is essentially for the purpose of making us less of a nuisance to other people and an inability to get along with other persons is a mark of defective personality. The nature of rewards for which a person works is indicative of trends in personality. The relative attractiveness of mental and material rewards, the moral conditions of work, the degree to which work is a function of the intellect, the emotions, or of activity and the severity and immediateness of the competition involved - all are potent considerations that reveal personality as they are answered.

If we are to estimate the moral value of any person's act, we must be able to say how strong were the impulses opposed to it. This is another way of saying that a person who is invulnerable to temptation, who is

not-temptable, has not strength of character but rather is character-less.

Self-consciousness, or what Parmelee called the sense of personality (previous citation) is not only an exceedingly important aspect of the total personality but practically the only phase for which Wells sees any hope of experimental measurement. It can be validly measured, he believes, through the use of the free word-association technique.

In Wells' opinion, the attitude that a person takes toward reality is the single most important phase of personal development. He believes that it depends upon the coordination of the affective impulses and proper external reactions and is adequate only when both are balanced in degree.

Balancing factors are compensations for obvious or hidden hindrances that the personality encounters as it attempts natural agreeable behavior. These compensations give rise to ideals through a process of what practically amounts to rationalization. Thus the ideal of chivalry

becomes such when social custom forbids the outraging of women. Parenthetically, it may be said that this is not proved by being stated.

In the majority of the adjustment phases we assume that normality is the state of neutrality and balance. This is not universally true, as in the case of elation and depression. We here regard normality as a positive and prevailing state of contentment only different in degree from elation.

Personal balance may be thought of in two ways. Dynamically, a person is well-balanced when he is in good adjustment to his environment. Statically, a well-balanced personality is a function for measurement, and may be judged upon the basis of the difficulty with which it is upset by difficulties. We may measure personality from the standpoint of balance if we determine to what extent a person profits by experience and acts objectively rather than with a strong subjective and emotional bias; if we determine whether or not a person aspires to act in accordance with, not exceeding or failing to fulfill, his

capabilities and capacities; if we measure the person's power of judgment in times of crisis or good or evil fortune; if we ascertain that there is no conflict between his morals and his conduct.

An analysis of the personality of many individuals upon these bases establishes five rather definite personality types:

1. persons who are not burdened with internal difficulties;
2. persons hampered by specifically unfavorable temperament but with compensatory vision and recognition of those adaptations which must be made ;
3. those persons who exhibit unfavorable trends which react in ways harmful to personality;
4. persons with bad heredity, with good or bad environment, who cannot adjust themselves because the environment is chiefly at fault;
5. persons who are constitutionally unfitted to shape their own mental or social reactions. These persons can never adjust themselves to conform to the social order.

Allport's Analysis.[1] G. W. Allport analyzed personality into what he considers are its essential major subdivisions. He does not attempt to further subdivide or define them after the manner of Wells. His personality components are as follows:

1. Physique
2. Intelligence
3. Temperament
4. Self Expression
   (a) extroversion
   (b) ascendance
   (c) drive
   (d) expansiveness
   (e) moderation
   (f) insight
   (g) self assurance
5. Sociality
   (a) social participation
   (b) social behavior
   (c) social intelligence

The elements are present in any one personality in a varying degree and there is implied in the statement of every element a dichotomous existence with intermediate and finely differentiated steps. Intelligence may be very high or very low. Extroversion suggests introversion. Insight suggests also the lack of insight, and so on. Measurement of these elements is not the function of the author of the analysis but when each is measured, the composite result suggests the condition of any given personality.

1 Allport - see Roback, p. 426.

CHAPTER III.

METHODS USED IN THE STUDY OF PERSONALITY.

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Roback (page 432) points out that there are two clearly separated methods commonly used in the study of personality. One is the method of causal science and the other the methods of interpretative sciences. Frequently these are blended in a specific method as in statistical treatment and in the use of questionnaires. His analysis is worth repeating verbatim:

A. Methods of causal science
   1. Technical
      (a) experiments
      (b) tests
      (c) test-experiments
   2. Objective observation
      (a) controlled and standardized
      (b) uncontrolled and spontaneous
   3. Statistical
   4. Rating and ranking
   5. Mass investigation

B. Methods of Interpretative Sciences
   1. introspection
   2. psycho-analysis
   3. literary approaches
   4. direct or intuitive perception.

Technical — American psychologists have devoted a large part of their energies in this connection to the experimental method. Their work has practically all been

done within the past few years and is a peculiarly American contribution. Voelker's study of the function of ideals and attitudes is an early example. The Downey Will-Temperament Tests are a combination of test and experiment. This type combines the advantages of control, which is the feature of an experiment, with the sampling convenience of the test. It has the disadvantage of needing a large amount of interpretation. People frequently claim that every test is no more than a standardized experiment and that every experiment which obtains positive and clear-cut results eventuates in a test and that therefore there is no essential distinction between a test and an experiment. Yet Roback (page 433) distinguishes between them on the basis that a test is primarily designed to place the individual quantitatively on a given scale while an experiment endeavors to establish a general principle, which is a qualitative endeavor.

Observation Observation may be direct or indirect, controlled or uncontrolled. "Sizing up" a fellow-being involves the use of direct and uncontrolled observation. Controlled observation endeavors to reduce the

possibility of errors of judgment to a minimum by training observers. Controlled experimentation endeavors to reduce the possibility of error and false inference by controlling conditions, training observers in discrimination, establishing guiding rules and classifying possible human types. Biographical studies make use of the indirect observation of personality and likewise include interpretation and selection.

Statistical Method. Statistical method is applied to the study of personality in the tabulation and interpretation of data collected in questionnaires, biographical research, objective tests and the like. Rating and ranking schemes and the methods of mass investigation are divisions of the statistical method and depend for their validation upon statistical theory.

Introspection. Introspection occupies a borderline position between the causal and interpretative sciences. A person may gain some insight into his own motives and self-consciousness through this method but he cannot depend upon introspection of the content of his own consciousness without comparing his own mental states

and his own behavior with the mental states and behavior of others. To increase the validity of introspection, it is necessary to include the grouped introspection of many individuals, statistically treated and interpreted. Autobiographical writing and the writing of diaries are an extension of the introspective method, extending over a period of time, usually with the advantages of a unified treatment. They are not often exhaustive or analytical enough to give much more than broad hints as to the nature of the personalities involved.

Psychoanalysis. Under the broad name of psychoanalysis are grouped the methods of those who have been influenced by Sigmund Freud, regardless of their present or former affiliations. Notable among these are Adler, Jung, and Stekel. The method has been of real service in unfolding the nature of personality, particularly because the psychoanalyists have a passion for unearthing what have been unnoticed details. But their explanations have often led them into queer situations, for their interpretation has often been poor and fantastic. Cryptolias, artificial

expressions invented by patients undergoing treatment, are interpreted in the light of a pre-conceived conviction that they have a sexual significance. One such, the word "krverisam" contained, according to psychoanalytic interpretation,[1] elements of the words "krav" (demand) ensam (lonely) venereal, isolate, eroticism, and "samlag" (coitus). It meant "Life makes certain demands on bachelors."

Berman[2] Points out that the Freudian jargon, technicalities, and explanations are all metaphors and somewhat doubtful are true descriptions of mental processes. They are not able to provide us with an idea of what is happening in the cells of the body that causes the mental phenomena. He further attacks psychoanalysis on the ground that it ignores the powers of the body of originators and determiners of the Freudian wish.

German Struktur Gestalt. This important method of personality explanation has already been described briefly on page 14. It is a mental process in which cognitive, affective, and volitional factors are present

1 Teslaar, J. S. Van - An Outline of Psychoanalysis, N.Y. Modern Library, 1925, page 309.

2 Berman, L The Glands Regulating Personality. N.Y., Mac Millan, 1922, page 187.

withrequal weight; which makes a judgment of personality with the same precision and exactness that a kodak makes a snapshot.

Hartsthorne and May's Approaches.

Hartshorne and May[1] make suggestions concerning approaches to the measurement of character which are pertinent in their relation to the measurement of personality. They say that it is possible:

1. to make psychological and philosophical research into the nature of personality in relation to social growth. This is probably what Furfey calls the developmental age.[2]
2. to make historical research into
   (a) theories of personality from the standpoint of modern psychology and social science.
   (b) a comparative study of historic methods of developing personality.
   (c) an evaluation of methods of measuring personality.

1 Hartshorne and May Studies in Deceit, page 4.
2 Furfey, Paul H. Vol. 17, Journal of Ed. Psych. page 43.

3. to make surveys that include

   (a) a critical examination of current methods of developing personality.

   (b) a critical study of contemporary personality in all its aspects as exhibited in population groups distinguished by age, mental age, sex, location, standard of living, denomination, and the like.

4. to do research in the technique of research for the purpose of creating tools for use in the preceding three sections. Present research methods need refinement and standardization as a necessary condition for thoroughly scientific work.

The research methods referred to above are these:

1. Biography (and fiction)
2. Observation
3. Questionnaires
4. Case histories (a form of observation)
5. Rating methods
6. Testing and measurements
7. Analysis
8. Laboratory experimentation.

Hartshorne and May were confronted with the problem of deciding the most satisfactory and basic method of measuring character (or personality). They chose testing and measurement because it had been relatively neglected and because it provided a basic approach to fresh scientific research in the nature of personality and its growth. They argue that the development of means of personality growth depends on the availability of measuring the results, for plans which are now being produced in large numbers, having no experimental basis, may be just as likely to harm personality and character as to improve it. There is no check on the product. Contrarily, experience has proven testing to be valid and valuable in at least two fields - the measurement of intelligence and the measurement of achievement.

Case Studies. The true relation between the methods of case study observation and the methods of testing and measurement[1] is one of mutual helpfulness. They are supplementary approaches. It is necessary to apply

1 Hartshorne and May Studies in Deceit, page 6.

statistical treatment to case studies and a detailed and intensive testing program needs the verification that case studies lend for the validation of test procedures and the application and adaptation of its methods and results to individuals.

Of itself the case study method is attractive. Case studies have "not only seriously undertaken to repair the damage done to the personalities of children by life in oppressive, hostile or degrading environments but have also pointed the way to school, home and community conditions which would in practice be more likely to achieve the results in character which the schools and churches have been so long proclaiming as their chief concern."[1] Case studies not only stress personality as of foremost importance but also insist that personality mechanisms rather than pure behavior must be studied. Case study records are sometimes poured into definite forms or molds and at other times left as free descriptions. A form leads to the securing of more information but it tends to be less easily recognized than the same information given with the high and low lights that are seen by the observer.

1 Harsthorne and May Studies in Deceit, page 6.

Questionnaires. Questionnaires were among the earliest of measuring instruments. Early ones were admittledly crude and in the eyes of some folk, they all stand condemned to day on that account. Nevertheless, they still retain their popularity and appear in a variety of forms. They may be objected to mainly on the ground that answers given to them tend to be highly conventional. They are not useful in obtaining accurate answers to questions having subjective referance but are worthwhile so long as they deal with material that is objectively available. (Just so long as the answers run no risk of being in conflict with what is socially approved.) Beyond this stage their "fakability", (the ease with which the subject may record a false response), puts them outside the realm of useful methods.[1] Symonds quotes Thorndike to this point: "Conclusions about the facts studied only indirectly through the reports of incompetent observers, in the case of individuals representing a partial and undefined selection, compiled by a single and possibly prejudiced student, without the knowledge of the technique and logic of statistics, are unreliable."

1 Symonds, P.M. "Present Status of Character Measurements", Journal of Educational Psychology.

But questionnaires have been subjected to critical analyses and reliabilities of as high as plus-55 have been found by Cady in connection with his studies of incorrigibility. From this evidence it is justifiable to assume that the questionnaire is capable of becoming a useful instrument for the measurement of personality, either alone within its range of specific usefulness or in combination with other tests, looking toward a total score or result.

Observation. Observation, as was pointed out on page 39, takes many forms. Among these may be catalogued attempts to estimate character or personality by the observation of facial expression, the shape of one's head or the color of the eys. These attempts are no longer taken seriously. However, it happens that most people seem to carry more or less stereotyped mental images of persons like financiers, ministers, Bolsheviks, senators, and the like and it is noteworthy that they are able to identify specific individuals by type more often than pure chance would indicate.

But this method of observation, while slightly

hopeful, is neither accurate nor scientific.

Rating Schemes. Rating schemes and ranking methods have held the center of attention and have been as severely criticized as they were favored. They are open to the criticism that their reliability is in doubt, although it has been experimentally proved that careful and accurate ratings may have reliabilities of over .60 with a range of from .40 to .97.

Time and experience in the form of experimentation have provided much valid information about rating methods, a large part of which Goodwin Watson summarized in January 1926.[1] It appears that people vary considerably in their ability. Likewise people vary considerably as to their suitability as subjects for ratings; i.e., some folk may be rated more easily than others. It is not only easier to rate some people than it is to rate others but it is easier to rate some traits than others. In order to increase the ease of ratings it is worthwhile to make ratings on the basis of past or present accomplishment and to make all ratings just as objective as possible. As an aid to objectivity, the terms in which the rating scale is stated should be as

1 Watson, G.B., Journal of Educational Psychology, Vol. 18, 1927

free from ambiguity as possible. When traits are not exactly defined it is to be expected that there should be difficulty in making ratings.

It is almost obvious to a careful thinker that rating schemes are likely to suffer because there is a tendency for a rater to make a <u>total</u> judgment at the outset of his rating (or to have it formed before he starts to rate an individual) and then to let this total judgment affect all his detailed ratings. Students of rating schemes call this a "halo effect",[1] for it is a constant tendency to divert the rating of every specific trait toward the total favorable or unfavorable opinion of the rater. Therefore, it seems logical that it is not well for the rater to know the subject he is rating intimately. This opinion has been vindicated experimentally, although it has been also demonstrated that rating works much more satisfactorily when the rater is at least acquainted with the subject, thus avoiding under-ratings that might be due to excusable ignorance on the part of the rater. In this connection, it is worthy of note that the ratings of judges who are familiar with the subjects in more than one field of activity are more valuable

1 So named by Professor E. L. Thorndike of Teachers College, Columbia University.

(as ratings of generalities) then the ratings of judges whose acquaintance with the subject is limited in scope.

Experience shows that the median rating of a group of competent judges is more valuable than the rating of a single judge, unless he be extremely competent. In any event, it is always advisable to make every effort to train raters for their task.

Schemes of self-rating have been used that seem to successfully pick out the strong and weak points of an individual but the ratings on good points are usually too high while those on weak points are usually too low. Shen discovered that even though an individual is likely to rank himself as a member of a group, somewhat less reliably than his associates would rank him, he really tends to gauge his relative strength on various traits rather accurately.

This general method of measurement is divided into two fairly well-defined groups. In the first, ratings are made on a scale of assigned qualities; in the second, individuals are ranked in order with reference to a given quality. A number of methods for making ratings have

1 Shen, Eugene The Validity of Self-Estimates. Journal of Ed. Psych. Vol. 16, 1925, page 104.

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been developed. In the Army Rating Scale, the method of man to man comparison or the human-ladder method is used. (see pages 86-92) In the graphic rating scale, an unbroken line of about five inches represents the trait to be rated. The extremes represent opposing phases of the trait in question, such as scrupulous honesty and persistent dishonesty. The extremes and one or two points on the line ought to be defined in unambiguous terms. The favorable extremes ought to be placed at opposite ends of the line in irregular order in a scale which includes ratings on a series of traits; (see the New York Rating Scale for School Habits by E.L. Cornell, W. W. Case, J.S. Orleans, published by World Book Co., 1927). This tends to correct for a persistent motor tendency to check the same position on the line when a number of ratings are being made, regardless of the merit of each particular case. Such a scale permits fine discrimination since a check expressive of a rating may be placed at any point on the line and will indicate a difference in quality if the scoring system is detailed enough to recognize small differences on the line.

Another type of scheme uses descriptive phases for various degrees of a trait in order to help define the differences in the trait more accurately. This type does not use the line of the graphic rating scale. This might be called the method of check lists and it seems, in some cases, to have yielded better quantitative and qualitative descriptions than the graphic scales.[1] Furfey, in attempting to measure development age, broke up eighteen major factors which he believes are its constituents into subdivisions and had raters make ratings on each of the subdivisions. Then he averaged the ratings on the subdivision to establish a rating for the major trait. In this way, he arrived at more reliable ratings for his eighteen principal traits.

In an attempt to secure normality of ratings, the practise has sometimes been to indicate over each of the five or seven sections of the line-graph (in scaling behavior, seven seems to be the best number of intervals to use) the approximate percentage of cases or number of individuals, in a given group, who should be given ratings in that general vicinity. This,at first glance, would appear to force raters to make

1 Furfey, P.H. Journal of Educational Psychology, Vol.17, p. 43 et.seq.

arbitrary placement of individuals but if the group be large enough and if the number or percentage be regarded as an approximation of the correct number rather than as a number which must be precisely attained it does not have that effect.

It has been found that when judges express the degree of certainty or confidence they feel in their own ratings, those that are recorded as practical certainties have been found to be much more reliable than ordinary ratings, in which no degree of assurance is expressed.

Considered from every angle, it appears to be true that rating schemes are more valid and reliable than it was formerly thought to be true. If the necessary precautions are taken, a high degree of reliability and validity is likely to be obtained.

Physiological Tests. Physiological measurements are exact and relatively easy to make but the point that is really at stake here is whether or not there is any significant correlation between features of personality and physiological symptoms such as the rate of heart-beat, the respiration ratio or the galvanic reflexes.

Speaking generally, the verdict up to the present time is that there is very possibly a relation between such things and certain phases of character or personality such as the tendency to lie or the tendency to be a chronically depressed or cheerful person but that the nature of the relationship is not definitely established. Experimenters have been able to use the galvanometer to differentiate a group of subjects previously rated as predominately cheerful or depressed. The ability to distinguish the truth from a lie has been tested by measuring the subject's respiration ratio and blood pressure and the blood-pressure. Correlation in this case is far more satisfactory. It appears that a trait such as the tendency to lie can best be detected by the combined record of the sphymograph, the systolic blood pressure, the heart-beat count and the breathing curve.

Tests of Motor Ability. Many tests are being constructed and used in which the subject is asked to perform tasks that require manipulation. The General Electric Company is preparing a series of tests by which they hope to select workers who have high potentialities for developing skill in the complicated manipulative processes

necessary for workers in their assembling plants. Some tests of this sort merely aim to test the ability to do a specific type of work; others, it is claimed, reveal the subject's ability to visualize relationships. These tests are usually largely of the puzzle type.

Tests of information. Tests of information, aiming to measure the dynamic factors of personality, are relatively easy to construct. The technique used is the ordinary technique of the new-type examinations. The statement that it is relatively easy appears to be somewhat misleading to a person unfamiliar with the technique of test construction because it really involves a considerable degree of skill and a painstaking application. However, with care and thoroughness it is possible to obtain results having a high degree of validity.

Association tests. Association tests have been highly developed by Jung in connection with the measurement of extroversion and introversion and the principle has been used in numerous other connections. In word association tests, there is always the possibility that sophisticated subjects willfully may alter their reactions in a number of ways,

They may lengthen all their reaction times so that they show no significant differences. They may lengthen reaction times at irrelevant points, at their pleasure. They may associate non-crucial words in readiness to use, i.e., have definite preparation or a mental set that will produce words without much regard to the stimulation of the testing procedure.

THE FEATURES OF A TEST.

What It Purports to Measure. In 1925, Hartshorne and May studied critically tests of character and personality[1]. The first thing they ask about any test is "What does it purport to measure? Even if it is not obvious that a test often fails to measure what it purports to measure, a modest amount of experience with tests demonstrates the fact very clearly. A recent informal final examination in a college course on Tests and Measurements that the writer had an opportunity to examine used the completion story technique and purported to test the student's knowledge of the material

1 Hartshorne and May "Objective Methods of Measuring Character" Pedagogical Seminary and Journal of Genetic Psychology, Vol. 32, p.45-67, 1925.

covered in the course but, as a matter of fact, it was more properly a test of the student's general intelligence and his ability to make a connected story, somewhat analagous to the skill involved in solving a cross-word puzzle.

Hartshorne and May group tests of character and personality into four general classes:

1. Tests of ethical, moral, social, religious discrimination and judgment.
2. Tests of character and personality traits.
3. Tests of interest, attitudes, and prejudices.
4. Tests of instincts and emotions.

By the use of the now generally accepted standards of validity and reliability, it is possible to determine whether a test measures anything effectually. Methods of statistical analysis and validation determine whether or not it measures what it purports to measure.

Testing Techniques Employed. Tests constructors have developed a variety of techniques and their relative values have not, as yet, been completely or finally demonstrated. In some cases, the circumstances for which

the test was constructed prescribed the technique to be employed. In others, the time involved in giving the test is an important factor that points to one test method as being best for the given case, such as in the present studies of the Character Education Inquiry in which Hartshorne and May are now engaged,[1] combinations of methods (many of their tests are "performance" tests) are used as the occasion warrants. For a comprehensive survey of the various techniques employed in testing, the reader is referred to Ruch's "The Objective or New Type Examination", Scott, Fore sman & Co., Chicago, 1929 and Odell's "Traditional Examinations and New-Type Tests", The Century Co., New York, 1928.

Briefly summarized from the article by Hartshorne and May, they are presented here:

1. Ranking method. This is a scheme similar to that used in raking whereby words, phrases sentences, pictures or the like are ranked in order of their merit according to the subjective opinion of the person tested, working under specified directions. Brotemarkle's Comparison Test and Koh's Test of Ethical Discrimination both use this method.

1 See Studies in Deceit and Studies in Service and Self-Control.

2. The Scale of Values Method. In this method, the subject is requested to score given stimuli on a scale of values in which the steps are numbered and defined. Scales varying all the way from two to nine places have been used. Tests like Shuttleworth's University Assayer and Hart's Test of Social Attitudes use this technique.

3. The Multiple Choice Method. In the multiple choice technique, the subject chooses from a list or group of stimuli the responses or responses which are correct or best or truest. The stimuli may range as high as seven or nine in number although three, four, or five are usually given. Chassell's Multiple Choice Test of Religious Ideas illustrates the multiple choice method.

4. The Cross-Out Method. Pressey, in his X-O Test of Emotions was the first to use the scheme whereby the subject is given a list of words, phrases, pictures, or other stimuli and crosses out certain ones in accordance with the directions given.

5. The True-False Method. The true-false method is dichotomous and categorical in nature and makes the subject choose one of two alternatives, which may be marked true or false, right or wrong, plus or minus (indicating positive or negative belief) or by underscoring or encircling Yes or No in answer to a given question. The Woodworth Personal Data Sheet uses this method.

6. The Distraction Method. When the subject being tested is required first to do routine work until the effect of practice is eliminated and personal norms established, then required to do the same work while efforts are made to distract him, the method is referred to as the distraction method. The strength of the stimulus is measured in terms of the degree to which the subject's work is slowed down or rendered inaccurate. One of Voelker's tests known as the A Test and Downey's Resistance to Opposition test of the Will-Temperament group are of this variety.

7. Information Method. When a record of information is made not in order to measure knowledge but as symptomatic of the interest of the person being

tested in a given subject, the information test is applied in the field of personality and character tests.

8. Comprehension Test Type. Sometimes the subject is given a paragraph of reading matter and then asked questions about it - What does it mean? - or is asked how he would react in that situation. Allport's Ascendance-Submission Scale uses this comprehension type of test technique.

9. Recognition or Identification Methods. The recognition type may also be called the recall type and another name for the identification type is the matching technique. Very often the subject is requested to identify a facial expression or recall the meaning of a proverb. Tests of social perceptions which require the identification of photographs representing different moods or emotions such as the Gates-Langfield test use the recognition or identification method.

10. Performance Tests. Performance tests have the advantage of not having to depend on the use of the printed word in test directions or

test items. They have been used by Voelker in some of his tests of Trustworthiness, such as the Profile Test and Overstatement Test, the M and N Test of Suggestibility, and the like.

11. Association Tests. Association tests make use of free and controlled association of words or ideas. Their limitations have already been described on page 56. .

12. Physiological Tests. The physiological testing methods have already been briefly suggested on page 54 and need no further explanation here.

13. Analogies. The use of the analogical or matching method has not been observed by the present writer in the field of standardized personality tests but it is a well-known form used in new-type examinations, where the relationship existing between facts is the important point as in the simple analogy: A puppy is to a dog as a kitten is to a(cat) This method might well prove useful in personality testing, as a rigorous test of intellectual capacity.

Scoring Devices. The devices used to score tests of personality that have been built so far can be grouped(as Hartshorne and May did , previous citation) and described. But the important thing to ask about a scoring system or device is whether it adequately interprets the subject's performance on the test in such a manner that it can be used statistically and compared with scores made by other individuals. Briefly, scoring schemes may be grouped as follows:

1.. In many tests the number of test items completed correctly in the time allowed is the test score. In the majority of personality tests the time consumed by the subject in taking the test is not important and does not have to be taken into account in the score. Some association tests and tests of reaction time are obviously not in this class.

2. In some tests the score is established by finding the difference between the number of items checked, crossed out, or done correctly and a group norm or mode. This is the way the total idiosyncrasy score is derived for the Pressy X-O tests.

3. In some cases the test score is recorded as the difference between the performance on the test and standards established through consultation and agreement of experts. The method is used for practically all tests using photographs as described previously in the paragraph on the identification technique (page 62) and in Chassell and Chassell's Test of Forseen Consequences.

4. Sometimes the score is taken as the difference between the performance of the same individual on the same test under conditions purposely made different. This type of scoring might be used in the distraction method of test performance.

5. In a few tests the score is established by calculating the difference between the actual test performance and the subject's estimate of that performance as illustrated in Allport's Test of Insight.

6. The Downey Will-Temperament tests use as a score the ratio one type of response bears to another.

7. Some tests score the quality of the response. Most often they score the quality plus the quantity of the response but there are cases where the quality alone is recorded. In Hart's Tests of Social Attitudes, the score is the

record of what kind of a thing the subject likes or dislikes and the degree to which he likes or dislikes each suggested item, but in Fernald's Test of Ethical Perception or Healey's Test of Reaction to Moral Questions, the score is merely the kind of reaction given.

8. Tests of suggestibility usually yield a Yes or No score; i.e., a record is made of whether or not the subject yielded to the suggestions made by the examiner or the test items.

Norms or Standards For Interpretation. Any one of the previously mentioned scoring systems may yield a score for a test of personality that is of relatively little value unless the record of what other people do on the same test is available. For example, if a person should record eighteen correct responses out of a total of twenty-five attempts, where the score is the number of correct responses, the number in itself tells us little about the subject unless we know from experience what score the normal or average person makes on the same test. The record made bya group sufficiently large to yield a true average is usually called a norm and differentiated from a standard in thatthe latter refers to

the goal which it is hoped the average person will reach. The norm is the score he really does attain. Tests that are constructed for use with school pupils usually give norms for each school year and norms for chronological age. Likewise, a good test should specify the relative degree of homogeneity of the group from which the scores were gathered since the homogeneity of the group has a very definite effect upon the test results. Scores gathered from a large group, selected purely at random will have a different average from scores gathered from a group of equal size which is closely homogeneous such as an occupational, social, or interest group.

There may be different norms for different groups, i.e., college students, employed young folk, skilled laborers, and the like. Other things being equal, norms are most valuable when they represent the group with which comparison is to be made. If we are to have only one norm, for example, for a test built for school children, it would be most desirable that this should be for all pupils in the country or all English-speaking pupils. To secure such a norm it is necessary to test a large number of persons

who represent adequately the social environment of the whole population - i.e., a large average group with a good and poor group above and below it respectively.

A norm should be stable. It will remain so when the scores upon which it is based have been adequate samples of all possible cases and when it has been derived from a sufficiently large number of cases, and so long as no universal change affects all people and tends to raise or lower the norm. The naive point of view in regard to the number of cases necessary to establish a norm is that all possible cases must be tested in order to arrive at a satisfactory norm. This is not true for experience proves that there is a point where the addition of more cases does not affect the norm in any vital way. What this number is in any particular case can only be established by trial. When as many as a hundred new cases does not make a material alteration in the established norm, the stabilization process may be said to have been completed.

Reliability and Unreliability. The true measure of any less tangible quality that goes to make up personality is probably best obtained by finding the average of an infinite number of measurements of the trait or capacity when all of the measurements are made under conditions that are as nearly as possible the same. This kind of measurement it is impossible to obtain in the majority of cases and we are compelled to be content to ascertain statistically the probable extent to which an obtained measure differs from the true measure of the trait or capacity. Garrett, writing on this point, says:[1] "This measure of 'probable divergence' serves as an index of reliability of the obtained measure - of how good an approximation it is of the true measure."

Reliability is probably best described in terms of the similarity of responses made by the same subject under presumably identical circumstances, on different occasions. Symonds in "The Present Status of Character Measurement" objects to this conception of reliability, saying that the same individuals will not always react in the same way to the same test situations.

1 Garrett, H.E. Statistics in Psychology and Education, page 118.

His criticism is an individual one, though, and the consensus of opinions is that reliability is truly tested in the manner proposed.

Perhaps it is better to use the term unreliability in place of reliability for it is easily seen that the thing we are trying to find out is really how to measure divergence from the true measure rather than agreement with it.

The most convenient method for determining the reliability of a test is the method of self-correlation in which the degree of relationship (the coefficient of correlation) between two series of test scores is determined or computed after the same test or a duplicate form has been administered twice to the same group of pupils. If the test has been given but once and its reliability is desired, it is customary to split the test items into two groups, selecting an item alternately for each group and make the computations between the scores obtained in each group. When the correlation is obtained it is indicative of the reliability of the test. If the correlation is zero, the test is worthless in spite of any good features it may have. As the coefficient approaches unity the test

increases in reliability.

Attempts are sometimes made to ascertain reliability by making inter-correlations among the tests which go to make up a battery or group of tests which are given pupils as part of a single testing program. In such cases, correlations have sometimes been found to be so low that tests of single traits or personality items, such as suggestibility or speed of decision, are not reliable measures of complex traits, which in this case have not been sufficiently analyzed. It is necessary to secure responses to many situations if we are to hope to attain reliable measurement. This assumption is verified by experience which has proved that lengthening a test increases its reliability. The perfectly reliable test is infinitely long. Most of our tests of personality have a tendency to be too short. Tests which include a hundred representative situations in which a given feature is being tested are more likely to have a satisfactory degree of reliability than tests of fifty items or less.

Validity The question of how well a test measures what it purports to measure, that is, how closely it correlates or corresponds with the objective and valid measurements of the function that it purports to measure, is answered by a statement of its "validity". Odell[1] further explains validity as follows: "It (a test) may lack validity either because it is unreliabile, due to subjective administration and scoring, or because it measures some other ability or abilities than its function specifies. Thus a test cannot be valid unless it is objective and reliable but it can be perfectly objective and reliable without being valid. Since few, if any, tests possess perfect validity, the term is used in in a relative sense and the tests are said to be valid when they approximate validity. It has also been suggested that the term valid should be used in a more restricted sense than that just explained. In this sense it would exclude the factor of reliability. That is to say, a measuring instrument would be called valid if it performed its stated function better than any other which might be stated for it, regardless of how well it did so. Thus a test might be so unreliable that little confidence could be placed in the scores obtained from it,but if they were better measures

1 Odell, Charles W. "A Glossary of Three Hundred Terms Used In Educational Measurement and Research" University of Illinois Bulletin, Vol. XXv #28, March 13, 1928, page 65.

of its stated function than of anything else, it would be valid."

The second view of validity that Odell describes is not very often expressed and not at all generally accepted. Hartshorne and May in "Objective Methods of Measuring Character" propose three questions to be asked about every test in order to determine its validity:

1. How well does the test measure what it claims to measure?
2. What evidence supports the answer to No. 1 ?
3. Provided the test does not measure what it purports to measure, does it measure anything at all? If so, what does it measure and how well does it measure it?

Methods of validation are essentially methods of correlation which determine the extent to which the test produces results in agreement with criteria that are as nearly objective as possible. Sometimes the test elements are obviously valid, as in the case of some of the Voelker tests in which a grocer is instructed to over-change a boy. The boy may keep the surplus change or call attention to the error and is classified according to the procedure he chooses.

There is just the possibility that the boy might fail to notice that he received more change than he should and so be classified as dishonest in this case when he really was merely unobservant.

Validation of tests may be secured by correlation with other objective evidence. This may be in the form of other tests and was one procedure Brotemarkle used to establish his Comparison Test when he obtained the correlation between it and the Pressey X-O Test of Emotions. Other objective evidence may consist of school grades or marks and behavior such as was described in the previous paragraph.

Another method of validation uses correlation with ratings. Here there are two major objections. All the factors that make ratings unreliable help to prevent their use as valid criteria. These include lack of evidence as to their reliability, the halo effect, the error of conspicuity and their frequent ambiguity. The second objection grows out of the possibility of ambiguity in ratings (and in tests, for that matter) and briefly is that a rating may be valid and a

test may also be valid but their intercorrelation may be low because they each measure something different, the difference not being obvious or immediately discernible. But in general, it is true that high correlations are apt to be symptomatic of high validity and conversely, that low correlations indicate that the measurements are of different abilities, traits, or features.

Validation by differentiation involves the use of the correlation method in a special form where the test gives widely variant results for two sharply differentiated groups, such as delinquent and normal children. This is equivalent to taking account solely of the extremes of a large number of cases distributed by chance in approximately a normal curve and disregarding entirely the individuals in the middle ranges. A test is valid if it records accurately the fact that there is a significant difference between the members of the groups. With this type of validation it is possible to evaluate, one by one, all the items in a test but it is not at all possible to tell how the test will work in connection with individuals falling in the middle ranges of the normal

probability curve. A practical difficulty involved in the use of the method is that it is almost impossible to find two homogeneous groups that are contrasted in respect to the trait that it is proposed to measure.

Validation by age gradation proceeds on the assumption that mental functioning and character traits increase with age - up to a given point - and endeavors to validate tests for different levels so that a test on which an average five-year-old does better than the average six-year-old is said to be a good or valid test. This differentiation like the previous one, is valuable for showing the difference between two groups, i.e., the average five-year-olds and the average six-year-olds rather than differentiating between individuals who may fall in between the age of five and six years.

Validation by sampling is built upon the premise that sample or representative life situations are symptomatic of normal life procedure. This is really a crucial point in all schemes for the measurement of personality through objective tests for it is evident that we have not, at the present time, either the knowledge or skill necessary to measure all the

aspects of a given personality nor the time to make enough measurements of such aspects as we feel able to measure with a fair degree of certainty and so we depend upon what we consider to be a representative sampling process.

Raw Symptomatic Value of Tests. Persons who charge objective tests with having very little symptomatic value in relation to life situations are not without arguments to reinforce their charge, for it is extremely difficult to say just how closely results for a given test agree with results in life situations involving the same elements. Mc Call shows the possibility of this discrepancy when he says:[1] "Ask a cautious psychologist just what a given test measures and he will answer somewhat viz: 'It measures the ability to do so and so with the material which you see on the test sheet, when the test is applied under certain conditions.' If you are dissatisfied with this conservative statement you may enquire:'Will the pupil who deals with these test difficulties with a given degree of excellence deal with these same difficulties when imbedded in a real, practical life situation with an equal degree of excellence'?"

1 Mc Call, W.A. How To Measure in Education, page 195.

It is not possible to say with certainty whether test results and action in life situations coincide or not. It cannot even be said with certainty that they correlate highly. It has been determined that there is at least a rough correspondence and probably a rather close correspondence, for test conditions and life conditions are not as widely separated as some folk make out. The difference is greater for some tests than for others. In general it may be said that test results approach life results more closely as test processes approach the character of the life process.

Hartshorne and May[1] have worked out in diagrammatic form the scheme which is reproduced on the following page for the classification of test forms according to their symptomatic value. They first point out that test conditions may be natural or experimental, controlled or uncontrolled. Responses may be natural or experimental, directed or undirected.

1 Hartshorne and May Objective Methods of Measuring Character. page 55.

If the possible situations and responses are represented by a, b, c, and the possible responses are represented by x, y, z, then nine stiumulus-response test types may result. That is -

for situations -

a. Natural - uncontrolled

b. Natural - controlled

c. Experimental - controlled

there are responses -

x. Natural - undirected

y. Natural - directed

z. Experimental - directed

giving S-R types -

1. Sa - Rx	4. Sb - Rx	7. Sc - Rx
2. Sa - Ry	5. Sb - Ry	8. Sc - Ry
3. Sa -Rz	6. Sb - Rz	9. Sc - Rz

It is possible to <u>roughly</u> predict the validity of a test by the type to which it belongs. In the above list of nine types, the estimated validity in descending order, varies from one to nine as follows: 1, 4, 2, 5, 3, 6, 7, 8, 9.

A further description of the types may lead to a better understanding of reasons for and against their use in given situations.

1. Sa - Rx, a natural uncontrolled situation with a natural and undirected response, is what we are accumstomed to call conduct. "It is the free and spontaneous response of an individual to life situations as they occur."[1] This is what all tests aim to measure but it is rarely or never test behavior and does not easily adapt itself to testing technique. About the most that can be done in the matter is to observe, describe and classify it on a scale of arbitrary units.
2. In Sb - Rx the situation is controlled but the response is undirected. This S-R type is employed in Voelker's overchange test where a grocer is directed to deliberately give to boys more change than the circumstances warrant in order to see what their behavior will be.
3. Sa-Ry does not control the situation but does attempt to direct the response. Apparently no tests of this kind have ever been used but they would be quite easy to devise by the introduction into ordinary conduct (Sa-Rx) the

1 Hartshorne and May previous citation.

effort to control the response as when a group of boys aimlessly playing football is offered a prize for the best forward pass.

4. Sb- Ry presents a type where the situation is natural, i. e., occurring in the ordinary experience of the individual but controlled and the response is natural and direct. A school examination is a natural situation. The response to it is not if the examination is for the purpose of determining the pupil's promotion.

5. Sa-Rz represents an experimental response to a natural and uncontrolled situation. As yet no tests for this have been devised.

6. The Sb- Rz type represents an experimental or artificial response to a natural controlled situation, as in tests of word building where the experimenter selects from life situations certain ones that lend themselves to experimental procedure.

7. The Sc-Rx type has not as yet been developed. It would represent natural undirected responses to an experimental situation.

8. Sc-Ry gives natural directed responses to an experimental situation in which the subject reacts to somewhat artificial laboratory test materials with common everyday responses.

9. The Sc-Rx type is the one in which the situation and the response are both experimental. Most of the tests that have been constructed up to the present time are of this type. In them both situations and responses are those which are not likely to be found in ordinary life. The Pressey X-O test is an excellent example of the experimental situation and response functioning under test conditions. Nearly all paper and pencil tests use this technique.

This whole descriptive analysis leads right back to the point that the fundamental problem in the use of tests as measures of personality is to eliminate the separative di fference between test situations and responses and life situations and responses. It resolves itself in the question of whether we can truthfully claim to know and understand personality and to predict conduct from the results of test performance.

To find the true symptomatic value of a test it is necessary to compare results secured from it as tentatively constructed with results derived from tests known to be valid or from controlled observation. Granting that test results become more valid as test conditions approach life situations, it is a fact of experience that testing becomes so increasingly difficult as the types proceed from Sc-Rz (the purely experimental type) to Sa-Ry (the natural situation with the controlled response) under these circumstances the experimental (Sc-Rz) type cannot be despised. Every effort must be made to find it symptomatic of Sa-Rx behavior in which event it is greatly to be preferred to the Sb-Rx type, a cumbersome affair wherein the situation is controlled but the response is undirected. The purpose underlying all testing is to do accurately, quickly, and readily what it would otherwise take a long time to do.

Criteria of a Valid Test. Knight and Franzen[1] present a very suggestive schedule of criteria for use in judging the validity of a test which

1 Knight and Franzen "Criteria to Employ in Choice of Tests" Journal of Educ. Psychology, Vol. 12 pages 408-415.

is reproduced below in some detail:

1. Does it measure what it purports to measure?
2. Does it yield the same diagnosis today as yesterday - i. e., is it reliable?
3. Does it yield the same diagnosis in the hands of one examiner as it does for another - is it objective?
4. Does it yield a numerical diagnosis, the units of which are equal? If it is a scaled test, are equal numerical increments measures of equal increases?
5. Does it mean nothing at all of the quality measured by its zero score, so that a score of eight is twice four?
6. Does it interest the subject?
7. Does it register a wide range of abilities?
8. Does it distinguish between failures? Does it tell why a child has a low score?
9. Does it correlate to unity with intelligence when the abilities measured are at a maximum?

A tenth might be added -

10. Does it compare closely with criterion measures such as teachers' marks, ratings, other test scores?

A test which satisfies all of these criteria may well be said to have validity.

CHAPTER IV.

THE DESCRIPTION AND EVALUATION OF SOME TESTS AND SCALES.

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A DESCRIPTION AND EVALUATION OF SOME TESTS AND SCALES.

Tests of personality traits

There have been tests constructed and projected for almost every personality and character trait that can be named or created. Tests of aggressiveness, suggestibility, self-control, deceit, and the like are only suggestive of their kind. To a novice in the field the array is confusing and almost meaningless. But when the reasons for building such tests are examined, it will be seen that careful workers have not rushed headlong into test production but have had what, to them at least, seemed good reasons for their work. Notable examples of these tests are the tests of the knowledge of right and wrong, tests ofservice, self-control and deceit - all by Hartshorne and May, and the Voelker tests of trustworthiness. The investigations for use in which these tests were created, were designed to do their share in charting a small part ofwhat might be called the sea of personality in an effort to establish with some degree of certainty a few bearings for future investigators. All of the tests that are to be described may have claimed for them a two-fold aim, first, to discover some facts about human personality, and secondly, to suggest a new method or improve an old method for use in further investigations into the nature of personality.

There is no one test that adequately measures all of a human personality and there are few people so naive as to expect that one could be constructed. The tests of personality and character that exist today have been constructed by a large number of authors working individually or in small groups without any effort to make a systematic canvass of the elements of personality.

Should a person care to pick and choose among the existent tests he might assemble a group of tests measuring significant phases of personality, and after administering them all to a person, assemble a measure descriptive of that person, after the fashion of the assayer who passes judgment on the character, extent and value of a vein of gold on the basis of samples chosen from its various parts.

It is not the purpose of this thesis to assemble a group of tests in such an attempt and the tests which it describes and attempts to evaluate are chosen more or less at random in an attempt to present a range of tests rather than any complete series.

A. THE ARMY RATING SCALE.

The man-to-man comparison scale developed by Walter Dill Scott came in 1918, under the stress of wartime need, to be used as the Army Rating Scale. The rating in this method is carried on by a process of comparing the person to be rated with five others known to the rater, who range from the best to the worst possessors of the particular trait that is being rated. A sample section of the scale is given:

The Army Rating Scale.

I. Physical Qualities Physique, bearing, neatness, voice, energy, endurance, consider how he impresses his command in this respect.	Highest .....15..... High .....12..... Middle..... 9..... Low..... 6..... Lowest..... 3.....	

In the spaces following "highest", "high", etc. names of men who, in the rater's estimation, occupy such a place in relation to the physical qualities. The man being rated has his name written in the space to the right of the man with whom he

compares and receives for that trait the number of points beside his name. Other traits on which men are rated include intelligence, leadership, personal qualities and general value to the service.[1]

Evidences that accumulated from summaries of the ratings made by means of this scale show rather conclusively that they were highly unreliable. Dr. Rugg concludes that the rating of personality and character is not practicable under the conditions that prevailed in 1918-20. He answered his question in the affirmative provided three things were true:

1. That the final rating be an average of at least three independent ratings made on an objective scale.
2. That the scales in every case be comparable and equivalent.
3. That the raters be well enough acquainted with the subject that they are competent judges.

With the first of these proposed criteria for ratings there is no reasonable quarrel for it was conclusively demonstrated in all the ratings made on the Army Scale (well over a hundred

1 For a description of the scale and results of its use, see Rugg, Is The Rating of Human Character Practicable? the source from which much of this section has been gathered.

thousand) that the only way to get even fairly reliable results is to have at least three independent ratings. In fairness, however, it ought to be suggested that if conditions two and three above are fulfilled that the chances of getting a valid rating from ratings by a single judge should be increased.

The man-to-man scale was a distinct improvement toward making scales more objective yet it was weakest in that there was no guarantee that the man rated as "highest" by officer A was equivalent to the man rated "highest" by officer B. It is an essential feature that the points of comparison on any scale used by different people be almost exactly equivalent and comparable if the rating is to be at all valid. This may be accomplished in at least two ways. Either the points may be identical or they may be selected as the result of conference and agreement as to their equivalence. In the first place, raters must become acquainted with the meaning of gradations in the scale. In the second, raters must agree that their scaling points are equivalent.

An underlying difficulty at this poimt, either in the man-to-man rating scale or the verbal type of scale (which is the support of a man-to-man scale) is that the gradations on the scale are not clearly defined and the trait on which the subject is being rated either does not exist or has not been defined. Any rating scale will lack validity so long as this definitive process i incomplete. The description and definition of traits on the Army Scale was very crudely done and the failure of the scale as a rating instrument is not surprising. "General value to the service" is a classification on which the range of interpretative opinion could be infinite and "leadership" is almost as hopeless.

In the matter of the acquaintance of raters with the subjects, it is obvious that some degree of familiarity must be attained before a rating could fairly be made. But if the subjects being rated are especially well known to the judges, the unreliability of the resulting ratings is much higher than those made when the raters have only a fair knowledge of the persons rated. It was discovered that raters had a tendency to rate either too high or too low. This, however, is not serious if it be known about any rater and his ratings corrected before they are compared with the ratings of other persons.

The discriminatory process involved in rating is hampered by the difficulty of scales to state objectively the elements of personality or the personality trait that is to be judged. It is affected by the interaction of groups of qualities and the peculiar emphasis given one group or feature. People are accustomed to thinking of noses in relation to faces and must make a special effort to abstract the consideration of a person's nose from the consideration of the total appearance of his face. In the same connection, if a person is asked to pass a judgment upon a "face" it is likely that the character of the eyes that are part of the face would unduly affect the judgment. Furthermore, it is a difficult task to hold in mind a group of tasks that contribute to a whole called "intelligence" and almost impossible to think of all the components of "leadership" in making a rating. The situation calls for detailed analysis of the "traits" involved, perhaps with a scheme of subsidiary ratings for each sub-heading.

The conclusions that have been reached experimentally in regard to rating scales have been rather fully summarized in an earlier section and need no repetition.

One noticeable tendency discovered in the Army ratings was later dubbed the "halo" effect in which a man was rated, usually in all traits, on the basis not of his actual achievement but on the strength of a general opinion, good or bad, as to the nature of his personality.

This leads to a discussion of the objective criteria by which validation of the scale was attempted. Four in number, they are applicable, with modifications, in the validation of later scales. They may be stated in the form of questions about the scale:

1. Does it select the men of outstanding ability as demonstrated in their immediate selection (from civil life) for a captaincy?
2. Does it designate men who make high scores in previously validated psychological tests?
3. Does it identify men of high calibre as demonstrated by collected data such as previous salary, promotions, and the like?
4. Do independent ratings of the same man, by competent judges, show little variability?

Rugg found that the Army Scale could not satisfy even one of

criteria and so concluded that it, was, as used, worthless for the purpose of rating personality and character.

This description of a rating scale that failed is not complete unless it points out the positive results that grew out of the failure. The first is that investigators grew more cautious in the use of rating scale and now respect the conditions under which they may look for greater success, so that now it may be said that ratings can be made valid if sufficient precautions are taken. In the second place, the demonstration of the inadequacy of the rating school technique stimulated the movement for the scientific analysis of personality and the objective measurement of social and dynamic traits.

B. AN ATTITUDE SCALE.

Attitude, defined by Thurstone and Chave[1] is: "the sum total of a man's inclinations and feelings, prejudices or bias, preconceived notions, ideas, fears, threats, and convictions about any specific topic." and must be included as a constituent factor in personality in a broad sense.

1 Thurstone and Chave The Measurement of Character, p. 5.

It is a subjective and personal affair that is often confused with opinion, which is essentially a verbal expression of an attitude. We are far more interested in attitude than we are in opinion and we only use the latter along with conduct as indices of attitudes. Both opinion and conduct may be distortions of attitudes and so unreliably indices. But it is rather a hopeless task to attempt to measure the underlying reality of which they are indicative directly and it is compulsory to seek honest expressions of attitude in opinions and conduct.

Thurstone and Chave became interested in the problem of measuring attitude and the results and methods of their study are fully reported in the "Measurement of Attitude" which is heartily recommended to the reader for further light on the whole problem. The only instrument that they have constructed so far for the purpose is the "Scale for Measuring Attitude Toward the Church", a copy of which is included in Appendix B. . Since the scale itself is subordinate in interest and usefulness in the measurement of personality, it should prove sufficient to beg for it the reader's inspection and consideration

and state that the authors have obtained a correlation of .85 between its two halves for a group of two hundred subjects. This, when interpreted by the Spearman-Brown formula yields an estimated reliability of .92 which is quite satisfactory. In the matter of validity they have not made out so well, having obtained a correlation of only .67 with self-ratings. In all fairness, it should be said that the ratings are not, by any means, an adequate criterion and further that they are making efforts to secure an objectively valid criterion. Their best suggestion in this connection is that the scale must transcend the group measured, i.e., it must measure all groups effectively. This means that if it were constructed on the basis of returns from a group hostile to the churches and reconstructed on the basis of returns from a group favorably inclined toward the church, the scale values of the statements of opinion would be almost identical on each scale.

The method used in the construction of the attitude scale is to lay out a base line the range of attitudes between those most strongly in favor of an issue

to those most strongly opposed to it with a neutral zone somewhere in between the two ends. A person's attitude is recorded by a "more or less" type of judgment following his endorsement or rejection of opinions on the issue in point. That is, he is more in favor or opposed to prohibition, or the church, or the union-labor movement than another person who has endorsed or rejected such and such a position. Subject X endorses statement A; subject Y endorses statement B; Subject X is more inclined toward the A-end of the scale (whatever it may be) than Subject Y.

The central problem in the scale's construction is to devise a scheme formaking the units (differences between opinions) on the base-line differ by the same amount. The final scale will consist then of a line on which statements of opinion relating to one attitude variable are placed, all located at a definite point and all removed from immediately adjacent opinions by equal degrees of difference.

For practical reasons the time-proved method of equally-often-noticed differences or equal-appearing intervals

was used in assigning values to opinions about the church gathered from a number of people and from current literature. A list of a hundred thirty such opinions was prepared, containing statements that the authors felt represented all shades of opinion in the matter. Especial attention was given to secure neutral statements so that the scale might register all shades of attitude rather than act as an instrument that would classify folk dichotomously. Statements were tested by five criteria - viz:

1. Are they as brief as possible?
2. Are they phrased so that they may be definitely accepted or rejected?
3. Does acceptance or rejection of the statement indicate something about the subject's attitude?
4. Are they "single-barreled" and unambiguous?
5. Are most of them really opinions on the attitude to be measured?

Each of three hundred subjects sorted the one hundred and thirty statements into eleven piles aimed to represent an evenly graduated series of attitudes ranging from those opposed to the church to those in favor if it.

Only the first, middle, and last piles were labeled to indicate the kind of opinions to be placed on it. This is most important for if all the piles were labeled the intervals would be arbitrary and set by the investigator whereas the principal point is to use each judge's opinion of what constitutes equality in degree between the piles.

The results of the sorting process were tabulated so as to show which pile each subject placed every statement and summarized in a table of cumulative frequencies(see pages 33-34, Measurement of Attitude) so that it is possible to tell what percentage of the judges placed any given statement in a given pile (or some pile to its left). In other words, in the case of statement number one, see below

Statement	A	B	C	D	E	F	G	H	I	J	K
	.00	.00	.00	.00	.00	.08	.17	.23	.33	.52	1.00

Eight per cent placed it in pile F, seventeen per cent placed it in piles F or G, twenty-three per cent placed it in H or to the left of H, and so forth.

The scale-value of each statement was determined graphically by plotting an ogivecurve from the cumulative

frequencies on an eleven place (eleven pile) base line and determining where the perpendicular from the fiftieth percentile intersected the base line. The measure of the ambiguity of each opinion is called its Q-value, equal to the difference between the quartile points for the curve of each opinion. Statements with a high Q-value are decidedly ambiguous and were therefore omitted. Determination of the ambiguity of the curve can be roughly made by inspection of the steepness and range of the curve. A steep curve, with a small range, indicates a clear and definite statement. Statements were deemed to be irrelevant and deleted when experimental subjects could endorse them in addition to endorsing statements at the opposite end of the scale.

Having considered carefully the scale-values of all the statements and having barred out irrelevant and ambiguous statements, the authors had left forty-five statements located at practically uniform intervals along the scale. "Inspection of the scale shows that the graduation is by no means perfect but it is probably as close as is necessary."[1]

1 Thurstone and Chave The Measurement of Attitude, page 59.

In scoring, either of two procedures may be adopted. One is to take the score values of each statement checked, add them and calculate their arithmetic mean. The other is to assign each statement a rank order number and calculate the average of the sum of the statements a subject endorses. This is in effect merely a simplification of the arithmetical labor involved.

Use of the attitude scale in the matter of attitudes toward the church (the Christian Church) showed that Jews were, on the whole, more indifferent and antagonistic to it, Catholics most strongly favorable toward it and that Protestants occupied an intermediate position toward it. It showed that women were slightly more favorable toward the church than men and that church attendants were more favorable toward the church than persons who did not attend church. All these results are just what common-sense would lead a person to suppose was true. Their value lies in the inference based on them, namely that if such a scale is diagnostic in groups whose attitudes are known, it may be used with fair assurance as a measuring instrument in groups whose attitudes are not known.

Thurstone and Chave do not make undue claims for their psychophysical method measuring attitude. They understand that the method of equal-appearing differences has limitations and is less valid than the much more laborious method of paired comparisons (described on page twenty of Measurement of Attitude). They realize that the one scale they have built so far has not been experimentally justified in a sufficient degree as yet and they are concerned with the establishment of a more satisfactory validity for it.

In their list of criteria for choosing statements, the fourth is given as follows:[1] "Double-barreled statements should be avoided except possibly as examples of neutrality when better neutral statements do not seem to be readily available." Yet in the scale for measuring attitudes toward the church, sixteen of the forty-five statements are double-barreled and a person may well approve of part of the statement and not agree with it fully. This seems to be rather a large number of such statements in the light of the fact that "double-barreled" statements should be avoided" but is probably justified by saying that they are examples of

1 Thurstone and Chave, The Measurement of Attitude, page 23.

neutral attitudes, the best possible. However, in all fairness, it must be said that the writer cannot demonstrate conclusively that they affect the validity of the scale. All he can do is to point out that they represent an apparent inconsistency.

The significance of the work of Thurstone and Chave toward the measurement of personality is dual. Practically they have produced a scale that possesses excellent reliability, fair validity and real promise. Furthermore, they have done their work with a degree of care and precision necessary for such a task that should teach others to do likewise. And they are not over-confident as to the worth of their results. They prefer that others sound their praises, if they deserve praise.

From the theoretical standpoint their application of psychophysical methods to the measurement of attitude is an important contribution to the measurement of attitude that may well outlive and outshine its first child, the "Scale for Measuring Attitude Toward the Church."

C. TESTS OF CONDUCT.

A Test for Ascendance-Submission.

Gordon W. Allport writes that the "A-S Reaction Study" (see Appendix C) published jointly by him and Floyd H. Allport, his brother, is an attempt to establish two important "trends-in-behavior" in their deserved places as traits.[1] To this end he first defines a personality trait as: "a form characteristic of behavior more generalized than the single reaction or simple habit."

Without entering into the controversy as to whether traits actually exist, it is evident to all thoughtful people that the personal qualities of ascendance and submission are often-present realities or general tendencies in their own lives and the lives of persons they observe. This does not imply that a person is continuously dominant or submissive in all his life-relationships but only invites attention to certain enduring dispositions that are observable.

1 Allport, Gordon "A Test For Ascendance-Submission". p. 119 Journal of Abnormal and Social Psychology, Vol. 23, 1928

Psychologically the Allports consider ascendance and submission as two traits, because they represent and invite different adjustment types and provide different motor reaction channels for their expression. But for the purpose of measurement they may be considered as the poles of a linear continuum and the cancellation of ascendance and submission responses in any given individual usually leaves a balance in favor of one or the other which may be expressed in such a continuum. Each person has two traits. The ascendance-submission test attempts to measure how greatly one predominates.

The test, a copy of which forms Appendix C of this thesis, presents verbally a number of life situations and asks the subject to select from certain standardized choices the type of behavior which most nearly represents his in those situations or their equivalents. Since men and women have different environments, two forms are provided, one for each. Because certain situations are divided into more than one part and the number of choices for each item ranges from two to five, there are a hundred and twenty-three possible choices for men and a hundred and forty for women.

Raw scores were assigned to each choice by averaging the ratings given to subjects (four hundred men, two hundred women) making the given choice. Then the average of raw scores for all choices was determined (3.48 on a scale from 1.4 to 6) and ascendance (+) and the submission (−) scores derived as the difference between the raw score value for each choice and the average for all choices, the lower values indicating ascendance. For example, a raw score of 3.35 on a certain choice, subtracted from 3.48, the average of raw scores for all choices, gives a +.13 score of ascendance for those who check that choice. By losing one decimal at a slight sacrifice of validity and multiplying by ten, the score emerges at +1. To find the total score, add all the ascendant or plus scores and all the submissive or minus scores and determine its significance by comparing with the table of norms provided with the test.

The decile points of scores derived from seven hundred twenty-seven cases of men and a hundred twenty cases of women provide norms for four degrees of ascendance, four degrees of submission and two neutral or average intermediate degrees.

Reliability of the form for women was obtained by giving forty-five students an early and a revised edition. The Spearman rank-order formula yielded a correlation of .78. For men the reliability was determined by self-correlation, using pages 1, 3, 5, against pages 2, 4, 6 of the test. The coefficient corrected by the Spearman Brown formula became .73.

Validity for the test has not been established. Correlations with ratings have led to validities ranging from .45 to .63 in a hundred cases where the ratings had previously been used to fix score values. Correlation obtained from ratings secured from three control groups varied from .29 to .33.

The test is self-administering although it is usually given as a group test. It must be motivated in such a way that the subjects will not be inclined to "fake" the results, which is exceptionally easy to do. In connection with the explanation and interpretation of scores it is important to make all subjects understand that ascendance and submission are both socially desirable and valuable traits. The authors suggest that the test will be useful in helping an individual know himself, in vocational guidance and industrial placement

and in relation to the selection of leaders, having in mind, in the latter connection that ascendance is not the sole factor operative in the production of leaders.

The test is worth a trial for the purposes proposed, always remembering that until it is more completely validated it has obvious handicaps. Beyond the fact of the test's existence as a measuring instrument lies the fact that ascendance and submission are proposed as personality traits. It is not altogether clear what ascendance and submission comprise, which is perhaps the reason at the root of the low validities obtained for the test. The nature of the traits is, in Biblical language, "seen through a glass, darkly" and needs more detailed analysis before measurement can be certain. This conclusion does not detract from the significance of the work of the Allports but rather places other investigators, in accordance with their express invitation, under obligation to criticise and suggest improvements in technique or underlying assumptions.

Voelker Tests of Trustworthiness.

Mr. Paul F. Voelker in 1919 and 1920 was faced with the problem of trying to demonstrate experimentally that social education operates to produce ideals and attitudes that function in conduct and character. He had the opportunity of working with troops of the Boy Scouts of America in the neighborhood of New York City. The ideal of trustworthiness is important in Scout training and, as Voelker says:[1] "A trustworthiness mind 'set' with its accompanying desire to live up to one's responsibilities, reduces the chance of yielding to the temptation to lie, steal, cheat, and do poor work. One is looking for something else and finds what he is looking for."

Voelker could produce arguments tending to prove that ideals and attitudes are powerful forces in the control of conduct and find plenty of support in the work of previous writers and from the laws of learning and of nature but in order to demonstrate their function he had to resort to experimental methods and devise tests purporting to measure the trustworthiness of individuals.

1 Voelker P.F., The Function of Ideals and Attitudes in Social Education. page 56.

Neglecting the details of the experiment, for which the reader is referred to Chapter V of "The Functions of Ideals and Attitudes in Social Education", it is proposed to deal only with the series of tests of trustworthiness used in it and the results obtained from them.

Test one of the first series is known as the Overstatement Test and attempts to ascertain if the subject can be trusted to refuse credit which is not due him. In it the examiner asks the pupil a series of questions starting with his name and progressing to questions about school and what subject or study he likes best. The examiner has been provided with the name of the subject in which the pupil does his best work and the results of an examination taken recently by the student in which he did not make a perfect mark. The examiner then says:" I understand that you are good in geography." (That is, he mentions the subject in which the pupil does best work). Then he says, "Is it easy for you?" and follows this question with one such as "Did you receive 95 in arithmetic on your last examination?" or "Do I understand that you are above the average in language?" The final statement or mark suggested is an overstatement and

the subject is scored zero if he nods, remains silent or answers yes. He is given ten if he contradicts the statement or gives the correct grade. He may attempt to modify the overstatement slightly in which case he is given credit ranging between zero and ten in proportion to the degree of his modification.

The second test is called the M and N test of Suggestibility and is an adaptation from the Downey Will Profile Tests seeking to find out if the subject can be trusted to stick to a point when he knows he is right. The examiner holds up in front of the subject two envelopes labelled "M" and "N", the latter always being at the right. The pupil is told that each envelopecontains a mental test, one of which is very easy and one of which is hard. "You may choose which envelope you will open." After the subject makes his choice, the name of the letter on the envelope that he does not choose is recorded by an assistant on a slip of paper.

After an interval the subject is asked three separate times which letter he chose, the suggestion always being that he chose the one opposite to his real choice.

The degree to which the subject resists these strong suggestions is scored from one to ten points, by single steps, one point being given if the subject changes his mind at the first or second suggestion and ten points being given when the burden of proof is thrown upon the examiner and there is a spontaneous rejection of the examiner's error or the subject's anger or suspicion is aroused.

The next test is called the Let-Me-Help-You Test. Its object is to show whether or not the subject can be trusted to refuse help in the solution of a puzzle after he has been instructed to try to solve it without aid. Fifteen toothpicks are placed on a table to form five equal squares as in the figure below. The subject is told to remove three toothpicks so as to leave only three such squares.

If the subject cannot work out the puzzle he is given a drawing of it and asked to work the solution out in three days without receiving help from anyone. More than one puzzle may be used for advanced students and any puzzles that may be so diagrammed are suitable. After the three days have elapsed the individual returns to another examiner who sets him to work at some Gilbert wire puzzles and casually asks him about the puzzles given him by the chief examiner, offering to show him how they are done. A careful record is made of the subject's response. In addition an opportunity is given for him to appropriate one of the attractive Gilbert puzzles and to "find" a small pocketbook previously placed under a chair. If the subject accepts help his score is zero. If he refuses, his score is ten. If he partially yields to the temptation to receive help, his score varies proportionately with the amount of his yielding. If the subject finds the pocketbook and fails to return it or if he steals one or more of the puzzles he is given a demerit.

The fourth test is known as the Borrowing Errand Test, planned to demonstrate whether or not the subject may be trusted to return borrowed property according to his

promise. He is directed to go borrow a designated pamphlet from Mr. Blank who loans it to him on condition that he return it by a given time the next day. When the boy delivers the pamphlet to the chief examiner and says "I must return the pamphlet before nine o'clock tomorrow morning" the examiner promises to leave it for him in a short time. The subject is scored ten if he returns the pamphlet and zero if he fails to return it.

In the next, the Purchasing Errand test, the subject is tested to see whether he will accept overchange. He is given a quarter-dollar and sent on an errand to buy "One copy of opposites test, nine cents". In change he is given two dimes, one nickel and a cent. If the subject returns the overchange to the clerk or twenty-six cents to the examiner insisting that none of the money is his, he is given ten points. He is scored zero if he keeps the overchange.

The Tip Test is sixth in the series and the subject is scored zero if he accepts a tip for a trifling courtesy. He is scored ten if he refuses it in accordance with the teaching of the Boy Scouts. (or Camp Fire Girls)

The Push Button Test aims to discover if the subject can be trusted to do a task exactly according to instructions. The subject is seated alone in a room with a watch and a push button and requested to push the button every two minutes when the second hand points exactly to sixty. There are interesting and diverting objects in the room and unless the subject is quite trustworthy he may fail to do the assigned task. The subject receives two points credit for each time he pushes the button within three seconds of the required time. If he fails to push within three seconds of the time he receives a zero score for that particular attempt. The examiner leaves the room and listens for the ringing of the bell or else uses an automatic time-recording device.

The "A" Test was suggested by Dr. E. L. Thorndike and is a further attempt to measure the degree to which a subject can be trusted to work faithfully at an assigned task in the presence of strong distractions. The subject is requested to count all the "a's" in printed material in which he is not likely to be interested in a period of five minutes. The count is recorded. Then he is given

an illustrated picture-book and told to do the same thing with its text. Record the count again and divide the number of a's marked during the first and the quotient will be the per cent of perfection.

The ninth test, the Profile Test, was used to discover whether or not a subject can be trusted not to peep when he is placed on his honor to keep his eyes closed. The subjects are asked to assemble Pintner Profile boards which differ only from the standard boards in that the ears are painted and not carved. After practice on the board the subject is given three trials to assemble the board with closed eyes. If he reports one success he is scored seven; if he reports two successes he is scored three; if he reports three or more successful attempts he is scored zero.

The last test of this series is the Tracing and Opposites Test, to determine if the subject can be trusted not to cheat in an examination. The subjects are given a prepared four page folder, perforated at the fold. Page two and four are blank. Page three contains a figure to be traced and is covered with a piece of transparent

waxed paper. Page one contains a list of words with blank spaces provided for their opposites. First the subject is requested to trace the design on page three on the waxed sheet. Then he is told to fill in the list of opposites on page one. Page three is next torn off ostensibly to give an assistant an opportunity to score the tracing test. The subject is then given the opportunity to score his opposites test under lax conditions which allow them to add words or make changes. These sheets when compared with the wax paper tracing of the words the subject wrote originally, show a discrepancy if the subject tried to make alterations or additions. The score is ten if no attempts to cheat have been made; the score is zero if any attempt was made.

The Tracing and Opposites Test and the Profile Test are given in entirety as group tests. The A-Test, the M and N Test of Suggestibility and the Let-Me-Help-You Test are given in two parts, the first in each case being a group test. The Purchasing Errand, Borrowing Errand, Tip, Push Button and Overstatement Tests are given as individual tests along with the last parts of the M and N Test of Suggestibility, the A Test and the Let-Me-Help-You-Test.

A second series of ten tests was developed for use as a final test at the end of the experimental period. They are similar in technique and content to the first series although experience showed that they were a trifle harder than the first ten.

These tests, it has been said before, purport to measure trustworthiness and to that end they have been designed to test it in a series of different situations on the assumption that their validity depends to a considerable extent on the number of tests in the series. Warrant for this assumption was received when, in an effort to economize on the time and labor involved in giving the tests, the scores obtained from the three best tests in the first series were compared with the scores for the series as a whole and it was found that the results obtained from using the three best tests were only approximately seventy per cent as satisfactory as those forthe series. The use of the first three of the tests, a random selection, in comparison with the best three, resulted in a very low correlation of .28.

The validity of the tests may be approached in two ways. In a sense they are obviously valid for they record actual responses to situations involving trustworthiness. But if the objection be raised that the tests do not provide enough measures in different situations to yield valid result two things may be said in rebuttal. The first is that each test was a random sampling of the individual's tendency in that connection, for there was little or no time to make a survey of the whole situation and a thoughtful choice of conduct. Furthermore, the tests numbered ten in each series and the chances are good for an average normality of response in that number. However, Mr. Voelker admits[1] that the more responses that are received from a test of any one trait the more likely it is to be valid and in the Overstatement Test of Series Two he attempts to secure accurate measurement from a number of responses to the same situation In actual experimentation, this test showed a very high correlation with the other tests in its series and might in itself be taken as a rough measure of trustworthiness.

In the original use of these tests, the subjects were given to understand that they were "mental" tests and

1 Voelker, P.F. The Function of Ideals and Attitudes in Social Education, page 98.

their specific character was not divulged. Mr. Voelker gives as his opinion (page 100) that a few of the brightest pupils discovered their real purpose. The second series was changed just enough to obviate the chance of the practice effect and conceal their similarity of purpose.

Voelker bases his chief claim for the validity of the tests on the fact that their correlations with the ratings of competent judges are high in almost every case when the judges are sufficiently well acquainted with the children to make fair ratings. His results show that the actual agreement between the judgments of an infinite number of judges with an equal number of the tests would nd be less than point .75. When he finds the average agreement of an infinite number of judges with one of the tests it proves to be .80 which is raised to .85 when relative importance is attached to the length of acquaintance of the judges with the subjects. In the same way, the average correlation of an infinite number of judges with an infinite number of tests(.93) is raised to .97. If Voelker's statistical treatment is to be accepted as correct then it may be said that his tests have a high degree of validity.

The reliability of the tests he claims to be .75. The present writer can not find evidence to show that this reliability was obtained from correlations of the first and second series for all groups. It seems to be the correlation obtained by taking the average of the correlation of groups E and I (.63 and .85 = 1.48 divided by 2 or .75). The question arises as to whether it would not have been better to use, or at least report, the correlation obtained between all the scores of Series One and all the scores of Series Two. Since the Voelker tests were given to comparatively few pupils, it was not possible to use the results obtained in the original experiment to extablish norms. Furthermore the type of tests is such that they are not likely to be repeated except as a check on the results first obtained. They were the precursors of the type of test used extensively by Hartshorne and May and later to be described and may be called informal in somewhat the same sense as the teacher-constructed new-type school examinations are called informal in contrast to standardized school examinations.

Voelker's contribution to the measurement of personality lies not so much in the results of his experiments nor in the day by day usefulness of his tests but in the suggestive technique which he used. The influence of his work is evident in all the literature that summarizes methods of testing personality and character and is more directly seen in the character tests of Hartshorne and May.

HARTSHORNE AND MAY

Tests of Deceit. Hartshorne and May, investigators for the Character Education Inquiry of Teachers College, Columbia University, have in the past five or six years done extremely significant work directed toward the measurement of character and although their work is not yet (as far as the writer knows) completed and their conclusions have not been published, their publications to date - Studies in Deceit, Studies in Service and Self-Control, Testing the Knowledge of Right and Wrong - are now in print and are so detailed and carefully done that it is both impossible and undesirable to reproduce them here.

Frankly, their approach to personality in Studies in Deceit and Studies in Service and Self-Control has been in the realm of character. Furthermore, the investigators themselves are the first to admit that they have not measured character in their work but merely conduct in a group of situations involving opportunities to lie, steal, and cheat. They propose in a future volume to explain how, in their opinion, it will be possible to measure character.

This is a statistical method of treating human personality and as such receives criticism from those who say that it fails to be of value in the measurement of individuals. The main purpose of the investigation is to discover facts about human nature and in that sense the results apply for the most part to groups rather than to individuals.

The investigators proceeded to measure deceptive behavior in four situations:[1] (1) class room situations where a pupil has the opportunity to cheat on a test, examinatio n or class problem, (2) situations involved

1 Hartshorne and May Studies in Deceit, page 407.

in athletic contests where the contestants may make false records of their achievements, (3) situations arising in social games where opportunity for cheating is present and (4) a situation in which school work is done at home. They tested lying by asking children to state whether they cheated in certain tests and by asking questions about the children's practice in situations which are generally approved but not often fulfilled in modern life. They tested stealing by throwing their subjects into situations where there were opportunities to take money or small articles. In the battery of tests there are twenty-two opportunities to cheat in the classroom, four opportunities to cheat in athletic contests, two in party games, and one in work for school done at home. The stealing tests present two opportunities to steal money and one to steal small articles. The lying tests offer respectively thirty-six and ten questions which may be answered falsely. These situations are not intended to be a complete or general sampling of all the possibilities of deception but are only reliable and valid in the types studied.

Methods for measuring cheating type of deceptive behavior.

A. In classroom situations.

1. In copying - from another pupil. This involved the use of two almost identical forms of each test distributed so that no two pupils, front or back or side by side, will have the same form. The results were ambiguous and the technique failed to give equal opportunities for copying. This test was discarded.

2. Duplicating Technique. This is an outgrowth of the Voelker paraffine test. Children correct their own papers after the examiners have had opportunities to make duplicate copies. Deception consists in copying answers from the scoring key.

3. The Improbable Achievement Technique - consists in giving a test under conditions such that any score above a given level indicates deception. These tests include puzzles that appear to be simple but are in reality quite difficult, weight discrimination, such as is used in the Binet

intelligence test and paper and pencil puzzles (squares, circles, mazes) to be done blindfolded.

4. The Double Testing Technique - is so called because the subjects are tested twice, once with strict supervision and once under conditions lax enough to make deception successful. The difference in the scores made in the two trials is roughly a measure of the tendency to deceive since there are opportunities to copy answers from the key or change answers to correspond to the key. Any type of test material that is available in equivalent forms may be used in this method.

It is necessary in using this method to make sufficient allowance for score fluctuations due to imperfections in the tests or in the interest and ability of the subjects. The range of probable normal fluctuations may be determined from results in cases where cheating is not possible.

For the purposes of the study, two types of material were used - one being intelligence testing material developed by Professor E. L. Thorndike and the Institute of Educational Research (five kinds - arithmetic problems, mutilated sentences for sentence completion tests, information test elements, word knowledge or vocabulary test elements and selections for reading tests) and the other being speed tests selected from established psychological material, namely -

1. A simple test of addition (requires addition of one or two digit combinations)
2. A number checking test as in the Army Beta.
3. Cancallation of A's (suggested to Voelker by E. L.Thorndike).
4. Digit symbol substitution - marking digits in associated symbols.
5. Making dots in small squares.
6. Cancellationof single digits - similar to cancellation of A's.

The speed tests are more difficult to give, for each subject must start and stop at the word "go" in the honest trials. The scores obtained are more difficult to interpret but the tests as a whole take considerably less time.

B. In work done at home.

In this situation the double testing technique was used, children taking the Institute of Educational Research's (IER) Word Knowledge Test home with them, under instructions to do it without help and being given the same test in school without any opportunities for cheating.

C. In athletic contests.

The investigators developed genuine athletic contests in which the subjects were entered, yet in order to allow full opportunity for cheating, the subjects were required to test themselves and record results, alone. The behavior recorded was as simple as possible, consisting in measuring -

1. the strength of the subject's hand grip with a dynamometer.
2. the subject's lung capacity using a spirometer.
3. the subject's ability to pull up or "chin".
4. the subject's ability in the standing broad jump.

The examiner recorded, unostentatiously, the subject's practice results and they were compared with the results recordedby the pupil. An improvement indicated deception for it was

determined experimentally beforehand that the number of trials offered the subject could not produce improvement over the practice trials, chiefly on account of the effect of fatigue.

D. In parlor games.

Here, as in the athletic contests, every effort was made to have the situation as natural as possible. Therefore these were of necessity group tests. The deceit had to be of the sort that could be objectively recorded and yet have a low visibility, i. e., be so inconspicuous as to fail to arouse protests from other children. Every child had to be offered equal opportunities to cheat in situations in which all were intensely interested.

Children were given the opportunity to peep in games like "Pinning the Tail on the Donkey" or in coordination puzzles like the mazes used in classroom tests. They were also observed in the bean relay (a modified potato race) to see if they carried more than one bean at a time,

contrary to instructions. In a fourth game, children are given a dime and another object and told to put them in a box in another room. There is no evident check-up and the child may go home without approaching the box or go to the box and deposit only one article.

Methods for measuring the stealing type of deception.

A. At parties.

This technique has just been described under the last of the party cheating games - where the opportunity to steal money and other objects if given the child.

B. In classrooms.

In one puzzle test a dime was planted in a certain box apparently as a misplaced part of another puzzle. The children were given ample opportunity to return the box without the dime.

In two other tests they were given a number of coins for use as counters. Stealing was indicated if they failed to return all the coins.

Methods for measuring the lying type of deception.

A. Lying in order to escape disapproval.

For the purpose of the study, lying was defined as the making of a false statement(instead of a true statement)when the truth is known. The pupils were given a questionnnaire asking about their performance in the IER tests given previously. The questions were such that honest answers, if they had cheated, would be calculated to bring disapproval - "Did you copy any answer from the keys?"

B. Lying to secure approval.

Another questionnaire, in two forms of thirty-six items each, attempted to determine what children would say they did in situations in which approved behavior is at a variance with with the behavior of most persons. Beyond a minimum of honest answers, established by the introspection of graduate students in educational psychology, the children were assumed to be lying to gain approval.

The scoring methods used in the tests varied to fit the needs of the particular tests but in general it may be said that wherever possible at least two scores were derived, a "fact" score and an "amount" score. The fact score recorded the fact of deceit while the amount score recorded the quantity of deceit, when such a record was possible. For specific scoring methods and for an accurate and concise description of the tests, the reader is referred to Chapter III in Book I of "Studies in Deceit".

In the studies in deceit, the investigators did not administer the tests and interpret them without any regard to other factors affecting the performance of the pupils and the age, sex, intelligence, emotional stability, physical conditions, socio-economic background and cultural background of subjects were correlated with deceit as well as the nationality and personality of parents, as well as the religious affiliations, kinship, school grade, achievement, deportment and friends of the pupils.

The reliabilities that Hartshorne and May report for their deception-measuring techniques are summarized on page ninety-seven of Book II and are high enough to be generally regarded as reliable with the exception of the tests

done at home which have a reliability of only .24. The other seven types are included in a range from .72 to .87 with four types having a reliability of .82 or over.

The matter of validity was approached through correlation with teachers' ratings and from the theoretical standpoint of regarding the tests as random samples of all deceitful behavior. Correlations obtained from teachers' ratings were very disappointing and their validity as a criterionis not high(.50 to .69) on the average. This has an important bearing on the work of Voelker who claimed high validity for his tests on the basis of teachers' ratings but in fairness to him it ought to be said that the criterion that Hartshorne and May successfully applied was probably quite suitable for the validation of his tests.

From the theoretical standpoint the process of validation consists in collecting enough random samples of the behavior being measured so that the sum of their scores will correlate at least to .90 with the hypothetical criterion, a very large sample of all of the types of the behavior in question. Working on this assumption they obtain validities

varying from .84 to .93 except in the case of the home work test which has a validity of only .49. These figures are reported on page 122 of Book II (Studies in Deceit) and are accompanied by a discussion of the procedure required to raise the general reliability to .90 and the validity to .95 which would be more satisfactory for predictive purposes. This would involve lengthening the tests to include thirty-one types of dishonesty which would more than triple their number.

Further criticism of the tests of deceit will be postponed until after the tests of service and of self-control have been described. A complete description of these tests is contained in the volume "Studies in Service and Self Control" (Hartshorne and May) to which, as to "Studies in Deceit", the reader is referred for study.

Tests of Service.

Service, as the investigators saw it in this connection contrasts work for self and work for others. It is necessary to differentiate between work motivated by charity and by cooperation. Cooperative charity appears to be the highest type of behavior in the situations that present themselves

in this connection. A person may work for others without considering what they want or need done, or he may cooperate with others to achieve a purpose that he shares with them (or possibly his own individual purpose) without intending direct assistance to the members of the cooperative groups. The combination of the two types is more socially useful than either or the two taken above.

Keeping in mind such modes of response, tests of service were devised as follows:

The Self or Class Test in which two sets of prizes were offered in a spelling contest. One set was for individuals and the other was for classes. No individual could have his score count toward both sets of prizes. He had to choose between having his score count for himself or the class. The class score depended in part on the number cooperating, which provided motivation for those pupils who might otherwise hesitate to attempt to help their class because they were poor spellers.

In the Money Voting Test, children voted to give money that the class had (or might get) to (a) the individual high-scorer in the contest, (b) to the school for equipment,

(c) to the class for equipment, (d) to the members of the class in equal shares, or (e) to some hospital child or poor family. Alternative number five was ranked first in value and number two second in value on the advice of competent persons.

The Learning Exercises adopted the digit-symbol matching exercises as used in the National Intelligence Test and tests of deceit (as previously described). Four equivalent forms were given under the effect of different motivation. On the first day the subjects were told that their grades would not be affected by their scores in an attempt to remove the effect of the stimulation provided by an examination for credit. On the second day the motive of helping the Red Cross was introduced when, for every child who raised his score, a quarter was sent to that organization. On the third day, the pupils had a chance to help their class win a prize and on the fourth day they each had a chance to win a quarter plus prizes for individual high scorers. This test was discarded because of the erratic nature of the performance of the subjects.

Other motives than those stressed were operating and factors such as the effect of learning and the tiresomeness of doing the same kind of test were no doubt present.

The School Kit Test provided for a school kit containing ten articles (pencil sharpener, pencils, double pencil, pen and holder, etc.) to be given each child as a present from a friend of the school. Then each child was given an opportunity to give part or all of the kit to some other (unknown) child who did not have one. The teacher emphasized the fact that it was quite all right to keep the whole kit if he wished. Some of the articles were more valuable in the eyes of children than others and increased their score if they were given away. This test has value as a measure of what we ordinarily call charity.

The Envelopes Test used four envelopes in which children could bring to school (1) jokes, (2) puzzle pictures, (3) short stories or (4) good pictures gathered at home and either clipped or copied for children who have no chance to get pictures, puzzles and the like. Articles were given value scores based on the difficulty of collecting

i. e., whether they were clipped or copied and so forth in a diminishing scale for duplicate items up to five. For more than five items of the same type, no additional credit was given.

The Efficiency Cooperation Test tested speed of work in addition in twelve two-minute periods when the motives were alternately (1) for self against other individuals in the class and (2) for the class against other classes. The subjects' score for self was the average number of additions done in the six two-minute "self" periods and his "class" score was obtained in the same way from his six "class" periods. The difference between the two scores was his Efficiency Cooperation score and might be zero, positive (more for the class) or negative (more for himself).

The Free Choice Test followed this and provided seven sheets of problems to be worked on, sheet by sheet, for the class or for the individual pupil. Each subject could choose to divide the sheets between himself and his class or give all to one but they could not, being

seven in number, be divided equally. In the preceding test, the subjects were required to work alternately for self and class; in the Free Choice Test, it is a case of "either" "or".

For a complete discussion of the reliability and validity of these service tests the reader is referred to Chapter V of"Studies in Service and Self-Control".

There was no opportunity to repeat the tests after a few weeks except in one instance,-the Free Choice Test with a group of one hundred and twenty pupils. That procedure yielded an "r" of .88. The Efficiency Cooperation Test, self correlated, yielded a reliability coefficient of .90 for the twenty-four items. On the strength of these results and correlations between two sub-batteries of the Service Tests (Battery A composed of one-half the Efficiency Cooperation Test, the Free Choice Test and the School Kit Test; Battery B formed from the second half of the Efficiency Cooperation Test, the Money Vote Test, and the Envelopes Test) which yielded a reliability coefficient of .78 for the total Service Tests, the investigators felt justified in concluding that the minimum reliability is not less

than .80 for the total service score.

As in the work with tests of deceit, validation was attempted by means of ratings, establishing what was called a "reputation" score, based on the estimates of teachers and fellow pupils, for each subject. The correlation between the actual test-results and the actual reputation scores is .61 but between true measures of service and accurate ratings, it would rise to .73. This might reasonably be expected to be increased if the correlation between the teachers' judgments and the pupils' judgments in building the reputation scores, was higher than .39 (its actual value, due to unintentionally prejudiced or unbalanced judgments).

Again, Hartshorne and May are not satisfied with the empirical validation of their tests and appeal to theoretical validity because there has lately arisen[1] - "a strong tendency among test builders to place greater emphasis on such matters as the internal consistency of a test and its capacity to represent the results of a very large number of similar tests. This we have called theoretical validity."

1 Hartshorne and May Studies in Service and Self-Control. page 101.

They found that approximately seventeen test types would be necessary to adequately sample the field of service situations. The five types that were actually used correlate .745 with an infinite number of such tests and to raise this validity it would be necessary to increase the number of test types up to seventeen. The service tests are diagnostic in that they differentiate between pupils who are definitely cooperative, charitable, or helpful and those who are not but they do not mark out accurately those individuals who vary in regularity of cooperativeness or who are neither strongly cooperative or non-cooperative.

Tests of Self-Control. Hartshorne and May define self-control in the special sense of a contrast between the tendency[1] "to continue an approved act with resistance to the tendency to engage in an interesting but disapproved act." They say that "persistence" and "inhibition" taken together roughly approximate what is called "self-control" and so they set out to measure persistence and inhibition, in classroom situations at parties and in individual tests.

1 Hartshorne and May Studies in Service and Self-Control. page 5.

The following tests were devised for classroom situations:

Tests of Persistence.

The Story Resistance or S-R Tests use three stories, the first of which is read up to the climax and then the printed ending is supplied to each pupil in a form difficult to read. The child is given the choice of finishing the story or choosing to read the second one which ends in a similarly difficult way. Once more he is given the choice of finishing the second story or beginning the third one. A practice exercise is first provided and the number of run-together words (three types: (1) unspaced capital letters, (2) capitals, small letters and spaces arranged in random order, and (3) unspaced capital and small letters mixed at random) that a subject can count off in three minutes is divided into the number of words deciphered in each story to measure in an approximate way the time a subject spent on each story.

The Puzzle Mastery Tests use mechanical and mental puzzles and the desire for achievement or mastery of the puzzles is a definite part of the tests. The Cross and Ring Tests are the mechanical puzzles and the paper-pencil puzzles included four problems: -

1. The Traveler's Problem - to trace a road between twenty points on a map over existent routes without any retracing.
2. The Broken Chain Puzzle - to fasten three five-link groups of chain together by opening only three links.
3. The River Puzzle in which a pair of two hundred pound men and a pair of one hundred pound boys must cross a river in a boat with a capacity of only two hundred pounds.
4. The Magic Square Puzzle - consists of a series of squares divided into sixteen equal squares each into which the subjects were to fit numbers which would give equal results when added in all directions or no more than four words which could be read either horizontally or vertically, each word appearing twice, once in each direction.

The results of the Efficiency Cooperation Tests of Service are examined for evidences of persistence by comparing the amount of work done in the first two periods with the work done in the last two periods on the assumption that the difference between the results of the first periods and the last periods would be a measure of persistence since there was a conflict between fatigue and a desire to achieve a high score, either for the subject or the class.

Classroom tests of inhibition:

Two use competing desires -

(1) The Story Inhibition Test where a child is either asked to inhibit the desire to know how an exciting story ends or to choose between the desire to know how a story ends and to make a good score in a test, and

(2) The Candy Inhibition Test where children are asked to refrain from eating candy placed on their desks until a forty-minute series of paper-pencil tests is over.

Two are distraction tests -

(1) The Ruggles Distraction Test in which the difference between arithmetic scores made with and without the influence of distractive printed material is significant and

(2) The Picture Inhibition Test in which simple addition problems and distracting pictures compete for attention.

Two are manipulative tests -

(1) The Safe Manipulation Test in which the subjects are asked to resist the urge to manipulate a test

safe placed on each desk until after a series of paper-pencil tests and

(2) The Puzzle Manipulation Test where the subjects are asked not to disturb puzzles until after another long series of paper-pencil tests.

The reliability of the battery of the persistence tests is prophesied to be .89; of the battery of inhibition tests .77 for the series and .80 for the series with the omission of the Ruggles Distraction and Candy Inhibition Tests. The theoretical validity of the persistence tests is .78 and the true validity is .52. The persistence tests do measure their conduct tendencies with reasonable accuracy and the lowness of their true validity is no doubt due to errors in measurement and in the faultiness of the criterion, the combined ratings of teachers and pupils. The inhibition tests are incomplete samples of a large hypothetical set of conduct situations and so have a theoretical validity of only .65 in some cases. In one group of approximately two hundred, the theoretical validity of the tests rose to .805 or .818 omitting the Ruggles Distraction Test. The so-called "true validity" is .80 which indicates the probability that

if ratings and tests measure the same things they would agree rather closely.

The individual tests of self-control included four tests of persistence and seven of inhibition and are suggestive of what may develop in the line of further individual tests. They are completely described in Chapter 21 of"Studies in Service and Self-Control" where they may be examined in detail. Their theoretical validity - of the inhibition tests - based on twenty-five cases is .78. Omitting two of the poorer tests it is raised to .89. The validity of the persistence tests could not be estimated fairly on account of the small number of tests and the fewness of the measures.

Tests of inhibition in party games included five game-tests -

("1) The Hopping Race in which the subjects are asked to refrain from starting in a hopping race until the signal is given. In the last two of the five trials, the expected signal is delayed.

(2) Crows and Cranes in which the signal to chase one's opponents or be chased by them is given in a way to make prediction impossible. A start in the wrong directions scores a failure.

(3) The Funny Story Game in which the subjects are asked to refrain from laughing when told a funny story.

(4) Simon Says "Arms Up" testing whether subjects can differentiate between commands "Simon Says Arms Up" and "Arms Up".

(5) The Noise Response Game in which the subjects are requested not to respond to any noise but a sharp whistle interspersed in a collection of other noises calculated to evoke responses.

The reliability of the party games as a series is .721 due to errors of observation. In order to get a reliability of .90 it would be necessary to conduct a longer party of twelve games with seventy-two opportunities to inhibit. The difficulty and expense involved in giving either the long or short parties made the whole enterprise prohibitive. Each of the games given evidently measured

a different thing for their intercorrelations averaged only .03 meaning that the games had practically no theoretical validity.

The value of the work of the Character Education Inquiry is not exhausted by an enumeration of the tests used and the results obtained although it is not fair to dismiss the studies without any word of commendation for the consistently average degree of reliability and validity secured in the testing. Persons interested in the measurement of personality are indebted to the investigators on the score that they have applied testing techniques, either new or adapted, for the first time on a large scale after a careful analysis of the "personality-character-conduct" problem with thoroughness and precision. The outcomes and implications of their studies are laid open for challenge and further thought on the part of all investigators and they promise, in Volume III of their series, a suggested general criterion for character that may be invaluable.

D. TESTS OF WILL-TEMPERAMENT AND EMOTIONS.

The Downey Will-Temperament Tests. The Will-Temperament Tests are underlaid by the assumption that temperament, expressing itself in the amount of nervous energy at the disposal of an individual and the tendency of such energy to discharge into areas that innervate muscles and glands (or to discharge in a roundabout way) is a valuable index to personality. Tests of this energy output must utilize some form of mental or motor activity. Miss Downey chose handwriting exercises for most of her tests because[1] "Writing is a muscular movement that leaves behind it a permanent record and nearly everyone knows how to write. It should however be most emphatically stated that in the use of handwriting for this purpose little account is taken of the kind of hand a person writes and no use at all is made of the assumptions of graphologists."

The Downey tests are divided into three groups: (For complete samples of the Downey Will-Temperament Tests see Appendix D):

1 Downey, June. The Will Temperament and Its Testing, page 58.

(1) Tests of speed and fluidity of reaction -

(a) Speed of Movement - of handwriting, relative to size and age of person.

(b) Freedom from Load - the ratio of the natural handwriting speed to the capacity speed.

(c) Flexibility - or the capacity to modify habitual procedure and depart from routine.

(d) Speed of Decision - as expressed in the speed with which a person can check character traits descriptive of himself.

(2) Tests of forcefulness and decisiveness of reaction.

(a) Motor Impulsion - referring to amount of energy a person has available and the freedom with which it is discharged.

(b) Reaction to Contradiction - referring to the degree of confidence with which a person maintains his opinion against contradiction.

(c) Resistance to Opposition - vigor with which a person reacts to the blocking of his purpose expressed in muscular movements.

(d) Finality of Judgment - how largely does indecision prevail.

(3) Tests of careful and persistent reactions -

(a) Motor Inhibition -power to keep an impulse or motor discharge under control.

(b) Interest in Detail - not equivalent to logical keenness.

(c) Coordination of Impulses - to handle a complex situation without confusion.

(d) Volitional Perseveration - the persistence of sensations, ideas or physiological effects of experience.

Miss Downey has attempted to validate her test in four ways. In the first place she asked a number of persons to make the experiment of trying to select the will-profiles of their personal acquaintances, from the graphs presented to them. (Will profiles are graphic representations of the twelve scores obtained from the test.) She discovered that identification judgments of profiles were successfully made more often than chance would allow, especially when sharply contrasting profiles are submitted for inspection. She also discovered that profiles were identified more frequently when the observer knew the profile-subjects intimately.

Yet Stoddard and Ruch[1] could not discover any evidence that a person could identify the profiles of himself or intimate acquaintances with any more than chance success.

In a second attempt at validation, Miss Downey examined profiles plotted from psychotic subjects to determine whether such profiles reveal exaggerated patterns typical of the symptoms of well-known varieties of insanity. She found significant reactions on certain of the tests such as those of motor inhibition and motor impulsion. Only depressive patients scored low on the latter and all scored low on motor inhibition. Her general conclusion was that not enough specific differences are certain to show between the will-profiles drawn from normal and abnormal individuals but that normal profiles are distinguished from abnormal ones by a general stability and a high score on motor inhibition that suggests probable nervous control and stability.

Miss Downey's third procedure was to ask competent individuals to rate themselves on a scale of ten for each of the will profile traits and then to compare their ratings with their scores on the test. This scheme is open to all the criticism directed against self-ratings and, combined

1 Stoddard and Ruch Ratings of the Downey Will-Temperament Traits. page 42.

with the fact that tests could not reasonably be expected to be entirely valid yields a joint error, so to speak, that is from twelve to thirty per cent. Miss Downey rather inclines to the belief that ratings rather consistently err by an average of ten per cent either plus or minus and urges the necessity for correcting them to this extent before attempting to make correlations.

In Stoddard and Ruch's study they could find no significant correlation between test scores and the composite ratings of three judges,(college room-mates of the subjects). This would seriously indict the tests if the rating was done carefully and the judges considered competent.

The fourth attempt to secure a valid criterion was made when the principles used in the will-temperament test were applied to a different type of motor activity (speech instead of handwriting) in order to see if the profiles yielded by the same individuals would be comparable. Here Miss Downey had the assistance of a speech-specialist who devised speech tests as nearly

comparable as possible to the handwriting tests. The correlations for a group of thirty-seven subjects were disappointing, averaging about .41. Miss Downey attributes this to the defectiveness in the speech tests.

Miss Downey's attempts to secure high numerical validity and reliability for the test and its divisions have been disappointing from the standpoint of present usefulness but sufficiently encouraging to stimulate a desire for further research in the matter. She has been criticised for establishing a dozen "traits" that do not exist but she replies that other psychologists misunderstand her and that she does not mean to imply traits of motor inhibition or flexibility and so forth but measure the operation of those tendencies. This misunderstanding, coupled with the question as to the validity of her assumption that evidence derived from handwriting records is an index of the "will-temperament" or the dynamic factor of personality, has cast a cloud on her work which threatens to obscure its good features.

Acceptance of the index value of the "will-temperament" as the key to personality is a too delightful simplification of the whole problem and denotes a charming degree of naivete on the part of anyone who could accept it wholeheartedly. It is not implied that Miss Downey is such a person although, as author of the tests, she is somewhat justified in having "leanings" in that direction much as the Episcopalians, in the opinion of good Roman Catholics, are to be commended for having "leanings toward Christianity".

But she is well aware of the difficulties involved in raising her technique to the point of perfection. Not the least of these are the irrelevant factors of age, sex, intelligence and specific habits which must be cancelled out if profiles are to become strictly comparable. It seems that she has not seriously questioned the propriety of assigning an equal score of ten to each of her test divisions. This is equivalent to the assumption that they are all of the same value in the estimation of the will-temperament and of personality and the assumption is quite open to question.

Richard S. Urhbrock, a colleague of Miss Downey at the University of Wyoming, made a study of the reliability and validity of the individual and group forms of the Will-Temperament Test. The results of his study are reported in the volume cited below.[1] Judging from the low correlation between Will-Temperament scores and scores derived from standard group intelligence tests, the tests do not measure non-intellectual traits, and are to that extent valid. But their correlation with ratings does not show them to be named correctly and so their validity must be challenged.

In the matter of reliability, the investigator found that the correlation between the sub-scores of one individual and three group forms of the test were, in general, very low although he discovered evidence that 'the reliability' of some of the forms might be considerably improved. In this connection, it was discovered that the individual and group forms do not yield closely comparable results, so that it is unsafe to transfer conclusions made on the basis of results secured from one to the results of the other.

1 Uhrbrock, R An Analysis and Evaluation of the Downey Will-Temperament Tests.

MissDowney devotes the concluding chapter of her book -"Will-Temperament and Its Testing" - to an exposition of the useful possibilities of the test. There is no reason to doubt that the instrument she projects will be exceedingly worthwhile when it is made more perfect. For the present it is hardly more than possible to commend her pioneering efforts and use the test as a secondary or supplementary diagnostic tool, realizing its imperfections and making every effort, with the author, to help in its improvement.

Pressey Cross-Out Tests of Emotions. The Pressey Cross-Out (X-O) Tests are distinguished in their purposes and in their technique. The latter is simple and, the authors say,[1] obvious and natural, consisting in the elimination of incorrect or unliked suggestions by a process of "crossing-out" or drawing a line through the material to be eliminated.

The Presseys experimented with the X-O technique in several types of tests but their test of emotion is better known and more successful than others attempted.

1 Pressey, S.L. "Cross-Out" Tests with Suggestions as to a Group Scale of Emotions, page 138.

In its present state, it is published in a form for adults and one for children. The children's form, owing to the nature of the stimuli, is an expurgated edition. A copy of the adult form is to be found in Appendix E of this work.

Test One is a test of affective spread and displacement. It consists of twenty-five lists of five words each. Most of the words have an emotional tinge, although approximately one-fifth are selected as joker words. The subjects are instructed first to cross out every word whose meaning is unpleasant and after that to draw a circle around the one word in each list whose meaning is most unpleasant. This procedure gives a double score. The number of emotionally-tinged words crossed out gives an indication of the subject's emotional spread or range. The particular words encircled indicate, by their relation to the word in each list most frequently encircled by a large number of people, the individual's emotional displacement. This test, if it is valid, ought to differentiate in the second respect at least, between "normal" and psychopathic or psychotic patients.

Test Two is a free association in which each of a list of twenty-five words set in capital letters is followed by five other words, as for example:

1. BLOSSOM flame flower paralyzed red sew.

Subjects are first requested to cross-cut all the words in each group of five that are related in the minds to the capitalized initial word. Then they are directed to encircle the one word that has to their thinking the closest connection with the capitalized word. Their score is the number of variations indicated from associations that are most commonly made.

The third is a test of moral discrimination in which twenty-five five-word lists are again provided. Most of these words indicate vices or weaknesses of human nature. Some jokers are included. Instructions are to cross-out all words representing things a person should be blamed for and to encircle the one thing in each line which is worse than any other. As in Test One this reveals a range and displacement, this time with reference to moral discrimination.

The last is a test of emotional balance or stability in the sense that the subjects are asked to cross-out in a list similar in structure to the lists of Test One and Three (and composed largely of the same words) all the words about which they have worried, felt nervousness, or dread and to encircle the one in each group about which they have felt most nervous. Again there is an opportunity to record spread and displacement and a further opportunity to see if words crossed out in previous lists are crossed out here. The test is timed to insure steady working speed and the subjects are instructed to guess in cases where they are uncertain so that two records are made for every group of words.

The tests are designed to explore human emotional nature and so are investigative in function. In addition the authors suggest that they may serve as the starting point of further study of individuals, for peculiar choices are likely to indicate some emotional difficulty.

Tentative norms have been published in the manual of directions (C. H. Stoelting Co, 3037 Carroll Ave., Chicago)

They are based on only a hundred and fourteen cases and need the support of additional data before they can be accepted as valuable.

The writer has been unable to find any definite report of the tests' reliabilities. Bridges[1] mentions a correlation of .58 between results of the tests and academic grades but it is not clear whether this is submitted as a claim for the validity of the test or the accuracy of academic grades. There is apparently no obvious criterion which might be used for the purpose. The most hopeful attempt seems to be the possibility of its differentiating between normal and psychopathic groups.

The Presseys' contribution to testing technique in the cross-out method is a real one. It is doubtless a trifle mean to point out that it is a limited reponse. The authors were forced to use the circling technique as well as the cross-out scheme to accomplish their purpose in each test. It is also somewhat doubtful as to whether it is any more natural for children or adults than simple checking of answers.

1 Bridges, J.W. The Value of Intelligence Tests in Universities. School and Society, 15:295, March 18, 1922.

E. PERSONALITY QUESTIONNAIRES AND INVENTORIES.

The Experience Variables Record. Personality, it is generally admitted, is a result of forces acting on the individual and(except for the behaviorists) of forces acting within the individual.

An inventory of the characteristic reactions of an individual in the common areas of human experience from childhood until the moment of making, cannot, if it be at all complete, fail to reveal the nature of the personality. Dr. J. O. Chassell has recorded life experience situations of a group of a hundred present-day American college students as revealed to him in personal conferences and constructed a record pamphlet (a copy of which forms Appendix F of this thesis) which he offers for usd in the statistical tabulation of personal histories, as a personality data questionnaire, as an aid in personal counseling in colleges or as a basis for group discussions in mental hygiene and social psychology.

The experiences inventoried are collated around twelve adjustment-areas: mother relationship;

father relationship; relationship with brothers and sisters; home life; religion and standards; sex development; love affairs; physical development; intellectual development; vocational adjustment; social - adjustment in comrade group, status in community, public recognition; general emotional adjustment happiness, etc.

Each adjustment-area is approached from the point of view of (1) the broad environment or general background, (2) the specific environment, the factors bearing directly upon an individual, (3) responses such as traits, interests, and tendencies and (4) problems of adjustment or "difficult situations" encountered by later adolescents. The first three approaches should throw much light upon the fourth. In all four there is an opportunity given to record the subject's present, early adolescent and childhood experiences. Statements under most headings have been arranged into a four place scale of concrete statements - a, b, c, and d. A and d represent the extremes in relation to each statement. Dr. Chassell says:[1] "It should be possible to locate any individual's status with respect to any paritcular Variable at some step between the existing extremes.

1 Chassell, J.O. The Experience Variables, Abstract, Section II.

This should enable us to make a fairly definite measure of the extent of presence of any trait or genetic factor whether it be maternal solicitude or response to corporal punishment."

For example under Religion and Standards, statement number two is:

Parent's Attitude toward the Religion (Church)

a. Sincerely religious; religion important factor in their lives

b. passive interest of average church-member type.

c. indifferent

d. opposed; against religion as ordinarily understood.

In the light of the sample it should be permissible to challenge Dr. Chassell's opinion that a check mark located against one of the four sub-headings above would give "a fairly definite measure of the extent of presence of any trait", i. e., an attitude toward religion or the church, especially if the reader keeps in mind the detailed and careful work of Thurstone and Chave in producing their scale for measuring attitude toward the church. Chassell does not say definitely whether he means to indicate the parent's attitude toward the church or religion, although the context apparently favors religion.

Furthermore the steps in the scale are neither exhaustive or even typically representative of people's attitudes toward religion and the reader is left in doubt as to whether the attitude is indicated by conduct or opinion or both.

In this sense the Record is incomplete and unable to yield accurate results. It is incomplete in other senses and necessarily so, for it is the result of an empirical study of the experiences of a hundred young people who did not include all of experience in their lives. Dr. Chassell has recognized this and provided space for the entrance of new experiences in the use of the Record.

The reliability of the Record was determined to be about .70 when a representative sampling of the statements were inserted among other material in a questionnaire given to a group who had previously indicated answers to them. This is not high enough to win it acceptance as a reliable instrument and its validity is obviously not perfect if it is intended to be a complete inventory of personality adjustment experiences, although its imperfection in that respect does not hinder its usefulness as far as it goes.

Personality-Study Questionnaire.

Floyd H. Allport has devised a questionnaire intended for the systematic study of personality in connection with the psychographical methods of personality study on which both he and his brother, G. W. Allport, worked at Harvard. (Previously mentioned on page 16 of this thesis.)

They discovered the need of such a questionnaire in any complete investigation of personality, to give a glimpse of the personality in terms at once objective and human. For any reader, the data presented in answer to the questions shows the personality in terms of past action, i. e., in behavioristic terms. The authors attempted to avoid the necessity for introspection on the part of the subjects but in the total number of questions (a hundred seventy-six) there are some which make such demands. For example, "Did you consider yourself neglected in childhood?" or "What prejudices have you?" Questions of this type seem to have been included in an enlargement of the questionnaire[1] designed for self-study as well as for use in reporting personality data in a

1 Allport, F.H. "A Systematic Questionnaire for the Study of the Personality" C.H. Stolting Co., 3037 Carroll Ave., Chicago, Ill.

psychological examination. Self-study rather implies introspection and on that score the questions may be justified.

Study of the personality is approached through (1) developmental history, (2) intelligence and abilities, (3) emotion and bodily activity, (4) ambitions, interests, and vocational tendencies, (5) habits of work, (6) recreation, (7) social and moral aspects (character), (8) sex and family life, (9) attitude toward self and attitude toward reality, and (10) compensation and self-improvement. The total number of questions under these ten divisions is a hundred seventy-six;in the abridged form it is seventy-nine.

Since the questionnaire is not primarily a measuring instrument, it does not yield a numerical score and its reliability has not been determined, probably on account of the practical difficulties involved. The scheme of organization differs from that which Chassell used in his "Experience Variables Record" yet necessarily covers practically the same material. It is patterned somewhat after Well's schema of personality (see Appendix A) to which reference has already been made.

The mode of response differs from that used in the Variables Record being a descriptive answer to a direct question. This makes the instrument more useable for self-study, according to the detailed rules Allport gives in it. The author is of the opinion that the use of the questionnaire in self-examination will not tend to make a subject morbid if he views the questions and answers objectively. There is no certainty that such would be the case. For directed self-study in personnel work it is much more likely to be suitable.

Without considering the questions in detail it is safe to conclude that the questionnaire appears to be usable. It is incomplete but even so its length makes it formidable. It is of distinct value in a systematic investigation of personality.

CHAPTER V.

GENERAL CONCLUSIONS.

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There is wide divergence of opinion as to the suitability of the present-day objective tests of personality and the experimental approach to the measurement of personality. As is usually the case in any controversy, there is much to be said on both sides. The record of the movement for the testing of intelligence contains evidence that is suggestively appropriate for those who would measure personality, for in the hands of over-zealous persons a low I. Q. tends to "load the dice" against persons, in relation to their chances of occupation or their social status and mode of living. To be sure it is eminently fair and desirable to face reality in matters of intelligence and other personality factors, yet until we are practically certain of the high validity of a test and know its relative importance in personal and social living, we should not let it speak the final word in a vital decision.

A. THE LIMITATIONS OF MEASUREMENTS.

The most widespread point of issue in character and personality testing concerns itself with the nature and

existence of the so-called traits. Popular thought has identified traits and virtues.[1] Discussion of virtues from a psycholcgical standpoint is indefensible because they are essentially ethical and "value" concepts rather than psychological facts. Being ethical in nature they are abstract in character, referring to an element that pervades a number of conduct situations and brings social approval when it is present. Uncritically considered, virtues have been psychologically considered as self-existent units of behavior but the mere attempt to describe "courage" or "honesty" irrespective of the situations in which they occur is fruitless.

More profitably, then, traits may be thought of as the tendency to act in a given manner in a number of situations, i. e., the tendency to be honest in golf, business, home, church, and the like.[2] The habit of honesty in specific situations becomes associated in some degree and may operate with sufficient certainty to allow of considerable prediction. It is an intriguing thing to devise an elaborate classification of the personality into a score or a hundred traits. But the danger in such a procedure is that of making classifications where none actually exist.

1 Roback, A.A. Op. Cit, page 458.
2 Hartshorne and May Studies in Deceit, page 211.

A trait is a static thing and the personality is not static but changing. Neatness, for example, is an excellent word but a rather barren abstraction unless the motives which underlie it are considered. It may result from the desire of an otherwise unattractive girl to become worthy of some attention and in that sense could be explained by the principle of compensation. Or it might be, in the case of children, simply a submissive response to parental suggestion or command. It might result from a phobia toward dirt or represent sensitivity toward one source of social approval.

Symonds[1] does not try to dodge the issue: "Are we trying to measure something that actually exists? Traits smack very much of faculties. Whatever we may name exists in a tacit assumption that we too easily make. We have found that memory and imagination are particular

1 Symonds P.M., The Present Status of Character Measurement. p. 491.

and depend upon the material with which we deal. More so are snobbishness, vulgarity, honesty and trustworthiness. A man may be snobbish at his club but friendly with his servants at home. To some of these things, such as trustworthiness, there are undoubtedly original tendencies, i.e., light-fingeredness. Where there are strong individual predilections we may suppose an original tendency. But much of trustworthiness depends upon the situation, the degree of training and social approval or disapproval." His contentions are supported by the experimental findings of Hartshorne and May (Studies in Deceit) who found that deceit and honesty were specific functions of life situations rather than unified and self-existent traits. There has been a concentration of attention on responses rather than on situations. Honesty [1] "is no more a quality of an organism than it is an aspect of the socially considered law of property." Children are honest or deceitful in any given situation not only because of their intelligence, age, home background, and so forth but because of the particular nature of the situation.

There is no cause for real discouragement over

1 Watson G.W. Character Tests of 1926.

this unsatisfactory situation. There is rather the obligation to pay attention to the importance of the situations in response to which personalities react on the one hand and on the other, to see beneath vices and virtues to the underlying motives that are the culmination of the personality factors of intelligence, temperament and character. In other words, the demand is to proceed more analytically in order to proceed more skillfully.

There is a strong movement in contemporary psychology to regard the personality as an undivided (or indivisible) whole. Insofar as it stresses the integrated nature of the personality it is a wholesome tendency for the view that personality is merely a sum total of habits, tendencies and the like is more shortsighted than truthful. The way in which personality traits are joined together is as much a part of the personality as the traits themselves; they weave in with one another and are related to drives and purposes of the organism. Personality cannot adequately be measured without a knowledge of the extent and nature of the organization of the sentiments and interests

which drive the individual. The mere measurements of traits leaves a picture in which the personality is lacking.

One of the difficulties encountered in the objective measurement of personality is that it perforce must express its results in terms that regard personality as fait accompli. This is true of any measurement. A temperature record is only true for the time and place in which it was made. A person's emotional record is only true of the time and under the circumstances of its making. In the realm of physical measurements this difficulty is solved by obtaining new records for new times and situations. Most personalities are not subject to radical fluctuations that prevent a relatively small number of measurements from being reliable guides to their real nature.

A proposed objection to the use of tests in measuring personality is the one which directs attention to the fact that it can never be exclusively objective. All tests results and all other persons must be perceived, and, in the process of that perception, interpreted by some other person,, for the other person cannot help using his

own background as the basis of his perception. Latin people are demonstrative and emotional; the Nordics are likely to call them unduly demonstrative! But this interpretative background that makes personality meaningful is, like the rain that falls on the just and the unjust, present in both subjective and objective descriptions of personality and not an undue handicap.

There are a number of criterions of objective tests that are directed more against the techniques involved than against the underlying theories. One of these concerns the ease with which many tests may be "faked" by persons who do not care to respond honestly. Physiological tests and ratings scales do not suffer from this weakness to any great extent. But in others, persons who are clever enough to catch on to the purpose of the test can influence their scores at will. So far the comparatively limited use of personality tests has kept them in the class of unfamiliar material but this condition cannot exist much longer. It seems to be necessary either to disguise their purpose in some manner or tell the purpose, at the same time appealing to the subjects to do their best for one reason or another.

Workers who prepare and administer personality tests should be imbued with a desire to use all the resources of science that are available to them and to do careful and thorough work in every case. Careless and untrained workers who either ignorantly or willfully jeopardize the validity of their results are a menace to the reputation of the scientific method. Testers should conscientiously correct for errors, safeguard ratings in every possible way, study both reliability and validity and try out tests claimed to be differential in function on groups other than those upon which they were differentiated.

Symonds in "The Present Status of Character Measurement" makes a suggestion with reference to the interlocking problems of reliability and validity to the effect that it might be better to work indirectly, i. e., to establish the reliability of a test before attempting to validate it for the reason that no matter how valid a test may be in every respect but that of reliability, if its reliability is zero or little more than zero, there is no gain. This is equivalent to saying that we don't know what we are trying to measure but we are trying to measure it

accurately and appears perfectly silly. But, Symonds says, after the test's reliability has been demonstrated, then what it measures may be determined.

This is intended as a constructive suggestion for test-builders but there has been no great rush to adopt it. Symonds himself suggests that it seems counter to human nature. Most people tend to do things only for a direct purpose. The fear that the test will turn out to be a perfectly reliable measure of something that isn't important continues to make the search for validity the primary consideration.

The number of measures of any trait that must be made before the record is adequate is an open one and must in all probability receive experimental verification. It is true however that the attempt to measure any trait by recording a few brief responses in a narrow situation is likely to give false results.

Critics of objective tests often claim that they are not suitable for the study of individuals and as a foundation for remedial treatment. Although this may be true

in some cases, it is not universally so and tests can be of great service in the study of individual personality. But even if this were not so, tests would still be justified on the basis of their contribution to our knowledge of human nature. Tests like the Hartshorne and May tests of deceit have this as their chief value and are frankly designed for that purpose.

Watson[1] develops the criticism that personality and character tests have an indirectly unwholesome effect in that an emphasis on character traits "is likely to lead to over-simplification and self-conscious goodness rather than to integrated, purposeful, enthusiastically creative living among complicated situations." This carries the case into the realm of educational method and is only applicable here because it suggests that personality tests must be considered from the point ofview of their effect on the subjects as well as the immediate results they provide the administrator.

1 Watson, G.B., Character Tests of 1926. page 301.

B. THE ADVANTAGES OF MEASUREMENT.

Discussion of the criticisms directed against personality tests has already brought out many of their advantages. It is a truism that if persons can agree upon their presuppositions and think logically from that point, that they must arrive at the same conclusions. Hence it is rather inevitable that, if the presuppositions of this thesis be valid, personality tests are justified. Starting from the assumptions that whatever exists, exists in some amount and what ever exists in some amount can be measured, it is logical to believe that personality can be measured.

The issue then is whether or not the methods of objective measurement can be applied to personality. Experimental evidence to that point, although faulty, allows the conclusion that they can. However, psychologists should make clear that tests are built on the assumption that environmental factors have had a chance to operate equally in the formation of personality.

The perfect measurement of personality is as yet unattained.

"A human mechanism is exceptionally complex. Any one basis taps only a phase of this total mechanism. A perfect prophecy can be made only when every phase of the mechanism is properly measured and properly weighted."[1]

A test measures manifestations of personality. It is admittedly a method of sampling yet sampling is commonly accepted as a sufficiently valid method if conducted with sufficient safeguards. Tests are not trial exercises of ability but are, when well constructed, carefully systematized and standardized devices for obtaining data about any topic. There is no good reason why this function may not be extended to the gathering of personality data.

Personality tests presuppose a more or less complete analysis of personality into its constituent factors. Human personality is so complex that as a totality it is overwhelming to a recorder. Just as a cabinet-maker measures a table by taking the length and the heighth and the width and then further measurements of the separate parts, so the breaking up of the personality into many items, for purposes of measurement, makes the task easier.

1 Mc Call, W. A. How to Experiment in Education. page 56.

Critics of tests direct their fire at "laboratory" performances, claiming that there is no relation to real life conduct. But their adherents believed that the laboratory methods and the controlled conditions possible in testing are obviously less cumbersome and more practicable than observation of spontaneous behavior and the difference in the situations is not great enough to invalidate the results obtained through tests.

C. THE ADVANTAGES OF DESCRIPTIVE METHODS.

Within the limits of this paper there has been no claim for the supremacy of tests over all or any other methods for recording personality. The experimentalists are doing only a share of the whole task. Psychiatry and psychoanalysis, using the case method rather extensively, are leaders in the work.

D. CONSTRUCTIVE SUGGESTIONS.

In the field of testing there is still much to be done. Miss Downey[1] makes a strong plea: "The search for specific personality tests is a valuable piece of work.

1 Downey, J. The Will-Temperament and Its Testing, page 45.

Possibly our greatest need is for a battery of personality tests from which may be chosen the most suitable for a particular purpose. Gradually, by a method of trial and error, tests will accumulate which may later be assembled in a series."

Testing procedure needs careful supervision. It needs to be guided by a set of objectives such as the following: (Adapted from those established by Hartshorne and May for their tests of deceit [1])

1. The test situation ought to be natural and controlled, or, more accurately, natural even when directed.
2. Test situations and responses ought to allow all subjects equal opportunities to exhibit the behavior, trait, emotion, etc. being tested.
3. No test should subject an individual to any moral strain beyond those of actual life situations.
4. Tests should not put the examiner and the subjects in false social relations to each other.
5. The test should not disclose its purpose unless such a disclosure is counteracted by an appeal for

1 Hartshorne and May Studies in Deceit, page 47.

best efforts, cooperation and the like. It should not be spoiled by publicity.

6. The activity demanded of the subject should be intrinsically valuable for him whether he is aware of the fact or not.
7. Tests for use in statistical studies should be group tests, short, easy to administer and score.
8. Test results should be clear and unambiguous.
9. Scores should be both qualitative and quantitative.

All tests cannot meet these requirements, now or in the future. But insofar as the limitations of each situation permit, they should be fulfilled.

Criticism of tests which directs itself against the notion that S-R reactions are the all-important factors in the manifestations of personality imply in such criticism that we cannot tell anything about a man's behavior until it is demonstrated. This deliberately ignores the observed fact that different people behave dirrerently in the same situation, a fact encouraging to those who cherish the belief that the personal organization is a vital factor in behavior.

Coffin[1] has approached the analysis of personality in a very satisfactory way. Measure, or examine these areas thoroughly and you have a fairly adequate record of personality:

1. The thought life - Is a person a problem solver?
2. Appreciations - What does a person value?
3. Dynamic factors - How much power and initiative can a person generate?
   Does he play?
4. Social inheritance - Does a person have a rich background?
   Does he live with people?
5. Institutions - Does a person possess spiritual insight and power?
   What is his attitude toward reality?
6. Ideals - Does a person think of the welfare of others and of his highest self?
7. Efficiency - How does he administer his own interest?
   Has he learned to work? Does he use some of the fruits of his labor for personal upbuilding?
   Has he dedicated his efficiency to the upbuilding of humanity?

1 Coffin, J. H. Personality in the Making, p. 87

7. Efficiency (continued) Has he vision?
Do his plans coincide
with world problems and
purposes?

Any complete and valid series of answers to the questions above would require an untold amount of research and labor. At that, it would not furnish the complete answer to the riddle of personality unless it included measurements of the association of these qualities in patterns or types corresponding to the existent types in humanity at large. This is a problem of the correlation of elements in which each item is weighted in such a way that no one unduly influences the total score. Only under those circumstances can the measurement of personality through objective tests become a reality.

CHAPTER VI.

SUMMARY.

SUMMARY.

Chapter I. Personality is complex and difficult to measure. Attempts in the direction of crude description dates from the time of Plato, Aristotle and Theophrastus. The humoral theory of temperament became articulate in writings of Hippocrates. Literary characterology and the humoral doctrines have given rise to many modern approaches to the study of personality.

Chapter II. Psychiatry has transferred the field of action from academic bounds into the realm of everyday life. Psychoanalysis investigates the causes of personality disorders. It has been beneficial in that it made us realize that there is a great deal of material having reference to personality that orthodox psychology does not know or investigate. Compensation is a mechanism that in a sense bridges the gap between psychiatry and psychoanalysis. Struktur and Gestalt psychologies are intuitive and interpretative in method and examine the undivided personality. Endocrinology offers the hypothesis that personality is regulated by the glands. Psychography attempts to explain personality by making a record

of an individual's reactions in a great number of different situations. Rational inhibition proposes to measure that part of personality which is character by noting the amount of force it takes to restrain innate impulses in accordance with a regulative principle. The American experimental approach has been largely directed toward the measurements of the so-called "traits".

It is difficult to get agreement as to the nature of personality. It may best be regarded as the entire human organism working together as a unit. It includes more than what is commonly known as character which may be regarded as a variant of personality. Temperament refers to the expression of a person's affective qualities and affects character and personality, of which it is a part.

Wells has constructed an outline of the factors involved in personality which is divided into fourteen fields of adjustment in which ninety-four "traits" operate. Failure to make satisfactory adjustments in any of these areas leads to personality difficulties. Allport analyzed

personality into five divisions, physique, intelligence, temperament, self-expression and sociality which include less specifically all that Wells covered in fourteen.

Chapter III. Roback remarks that the methods of causal and interpretative sciences are the two chief ways by which personality is studied. The methods of causal science include technical studies (like tests and experiments)- objective observation, statistics, rating schemes and mass investigation. The interpretative sciences use introspection, psychoanalysis, literary work and direct or intuitive perception. Hartshorne and May suggest that the complete study of personality must include (1) psychological and philosophical research into the nature of personality related to social growth, (2) historical research into theories of personality, methods for its measurement and its development, (3) critical surveys of current aspects of personality and methods used in its development and (4) research in the techniques necessary for accomplishing items one to three inclusive. Case studies, questionnaires, objective observation, rating schemes and objective tests are now the leading research methods in the field of personality.

Hartshorne and May group personality and character tests into (1) tests of discrimination and judgment, (2) tests of traits, (3) tests of attitudes and (4) tests of instincts and emotions, which employ a dozen different methods for securing responses from subjects and are scored in almost as many different ways. Most test-makers seek to establish test norms that indicate the goal that the average person reaches on a given test. It is desirable to establish the reliability and the validity of all tests before their use becomes widespread for a test which is not reliable is worthless and a test that does not measure what it purports to measure is deceitful. Reliability may be determined by repeating the test under equivalent conditions or by self-correlation. Validity is determined by correlation with objective criteria, with ratings, by differentiation by age gradation and by sampling. Tests become more valuable and symptomatic of the reactions of subjects in life situations as the reactions they require of subjects commence to approximate actual life conditions. But uncontrolled conduct is so difficult to record as a test that it is necessary to use more artificial but less cumbersome methods. There is at least enough correspondence between test conditions and life situations to make tests usable. In this connection Knight and Franzen suggest a group of ten criteria for determining the validity of a test.

Chapter IV.. Proposed or existent tests may be found for almost every personality trait that can be named. Careful workers in the field such as Hartshorne and May have worked systematically investigating one small section of personality at a time. Such tests have aimed to discover new facts about human personality and suggest new methods (or improve old ones) for the study of human personality. No one test adequately measures all of a given personality but if a person cared to pick and choose he might assemble a group or battery that would yield a significant total score.

The Army Rating Scale uses the method of man-to-man comparison. It was used extensively during the World War. Rugg's study of the results of its use concludes that it was practically worthless and would remain so unless (1) three independent ratings be made of every person, (2) unless the scales used remain constantly equivalent and (3) unless the raters become acquainted with those they rate. The man-to-man scale was an improvement over previous rating scales but, as used, needed much refinement.

The Thurstone and Chave Attitude Scale makes use of the psychophysical method of equal-appearing intervals in laying out, on a linear continuum, opinions representing attitudes (toward the Christian Church) so that the scale-values of the opinions differ by approximately the same amount. The scale, in experimental use, differentiated between Jews, Catholics and Protestants and between men and women, giving the results that common sense would expect. The inference then is that the scale can be used to determine the attitudes present in a group about which little or nothing is known. Thurston and Chave have done not only a good piece of work but developed a hitherto unused technique.

The Allport A-S Reaction Study is an attempt to establish ascendance and submission as traits. The test presents verbally a series of life situations and the subjects are asked to indicate how they do or could react in them. The test is extremely "fakeable" and can only be used successfully when people can be depended upon to give honest answers. The reliability of the test approximates .75. Its validity has not been successfully established. With these limitations in mind, the test is recommended for trial.

Voelker Tests of Trustworthiness are twenty conduct tests used in his study of the "Functions of Ideals and Attitudes in Social Education". In every one of them the subject has an opportunity to cheat and is regarded as successful if he refrains from doing so. The tests are valid in that cheating is obvious. Beyond that, the number of responses argues for the representativeness of the tests as sampling an individual's behavior. The reliability of the tests Voelker claims to be .75 although on what seems to be rather insufficient evidence.

The Tests of Deceit used by Hartshorne and May developed from those used by Voelker and again are conduct tests. These and their Tests of Service and Tests of Self-Control were used in the work of the Character Education Inquiry and are, in some cases, amazingly ingenious. The majority of the tests yield reliabilities and validities that are high enough to be satisfactory. The authors do much more thorough work from the statistical standpoint than many of their predecessors and their work is to be commended on that score. They adopt the present tendency

to judge their tests on the basis of what they would accomplish if they were numerically sufficient to adequately measure deceit or service or self-control.

The Downey Will-Temperament Tests are based on the assumption that temperament is a valuable index to the total personality. They test energy output, mostly in the form of the muscular reactions involved in handwriting. Miss Downey attempted to validate her tests by (1) asking judges to identify will-profiles charted from scores made by acquaintances, by (2) examining profiles plotted from psychotic subjects to see if they revealed exaggerated patterns, by (3) comparing ratings and will-profiles and by (4) applying the principles used in the will-temperament tests to speech instead of handwriting, to see if the resulting profiles for the same group of individuals would be comparable. Her results were not strikingly successful in any case and it is uncertain what the tests really do measure. Acceptance of the index value of the will-temperament as a key to personality is an unwarranted simplification of the whole problem.

The Pressey X-O Tests of Emotions are distinguished in their use of the crossing-out technique. They are difficult tests to validate and their reliability has not been demonstrated. But they are no doubt indicative, in some degree, of an individual's emotion balance or displacement and they are likely tests for widespread use in the investigation of human emotional nature.

J. O. Chassell's Experience Variables Record is an empirically made inventory of the characteristic reactions of individuals in the common areas of human experience. The collected experiences of a hundred American college students furnished material for the inventory which is gathered around twelve life-adjustment areas, such as mother relationship, home relationship, and the like. The questionnaire is not primarily a measuring instrument and does not yield a numerical score. The Record is necessarily incomplete although useful as far as it goes.

The Personality-Study Questionnaire of Floyd H. Allport is intended to give a glimpse of the personality in terms at once human and objective. The unabridged edition contains a hundred seventy-six questions to be answered by the subject,

ranging from matters of intelligence and abilities to compensation and self-improvement. It is patterned somewhat after Wells' schema of personality and, like the Experience Variables Record, does not yield a numerical score.

Chapter V. The value of tests is still a matter of controversy. Opposition to them often takes the form of attack on the "traits" as entities. Symonds says traits smack of faculties. The criticism that points to the personality as a whole greater than the sum of its parts is valid but it does follow that personality cannot therefore be measured. Personality records are necessarily past records but it is permissible to base judgments on past records in this field somewhat in the same manner as we do on weather records. Another objection to personality-measurement is that it can never be exclusively objective for the subjective influence of the measurer enters in. Numercus criticisms are directed against faulty or careless methods in testing and against tests as being open to "faking". Symonds suggests that test constructors work first to secure reliability and then seek out the validity of their instruments. Others criticize tests on the basis of the fewness of the responses

involved or because they are reputed to be unsuitable for the study of individuals or because they may have the unwholesome effect of encouraging attention to isolated virtues instead of integrated virtue.

But if it be true that whatever exists, exists in some amount and whatever exists in any amount can be measured, then the measurement of personality is possible and tests that measure manifestations of personality are steps toward that end. When all the manifestations of personality are scientifically measured the task will be finished. Testing procedure needs careful supervision and ought to be guided by a set of objectives such as those suggested by Hartshorne and May in Studies in Deceit. If we adequately measure a person's thought life, appreciations, dynamic factors, social inheritance, spiritual power and attitudes, ideals and efficiency we may hope to express his personality in quantitative and qualitative terms.

APPENDICES.

APPENDIX A.

WELLS SCHEMA OF PERSONALITY.

I. Intellectual Processes.

How easily does the person learn.
How good a memory.
What fund of information (relative to educational opportunity)
How well able to observe.
How vivid mental imagery.

II. Output of Energy -

How much motor activity.
How talkative.
How skillful with tools, needlework and the like.
What degree of bodily dexterity and grace.

III. Self Assertion.

How much effort to shape surroundings.
How independent of the opinions of others.
How much tendency to assume leadership.
How ambitious in material things
How able to bear up under difficulties and misfortunes.
How able to face crises.
What inclination to face danger.

IV. Adaptability.

How get along with other children.
How get along with people in older years (tactfulness).
How conformable to discipline.
What tendency to be guided by advice.
How resourceful.

V. General Habits of Work.

How prompt in reaction to situations.
How systematic in work
How executive.
How persistent.
How puntcual.

VI. Moral sphere

How well does the person keep a given word.
How truthful in matters relating to present or past.
How trustworthy in money matters.
How conscientious in the performance of duty.
How discreetly careful of the reputation of others.
How mindful of the equal rights of others.

VII. Recreative Activities.

Sports requiring quick and continuous action (tennis, motor-driving, sailing, etc.)
Less active sports (golf, automobile riding, billiards, walking, etc.)
Hunting or fishing.
Camp-life in general.
Games of intellectual character (whist, chess)
Games of less intellectual character (backgammon, hearts, casino)
Gambling or wagers.
Alcohol.
Tobacco
Other drugs.
Reading.
Music.
Pictures.
Artistic creations.
Delicacies in eating or drinking.
Sports involving physical danger.

VIII. General Cast of Mood.

How cheerful.
How stable.
How deep.

IX. Attitude Towards Self.

How self-conscious.
How conceited.
How patient, capacity to 'endure to the end'.
Demand for self-justification.

X. Attitude Towards Others.

How sympathetic.
How generous.
How critical.
How jealous.
How sensitive.
How forgiving.
How able to judge others.

XI. Reactions to Attitude Towards Self and Others.
How scrupulous of personal appearance.
How sociable.
How socially forward.
How demonstrative of emotion.
What tendency to unburdn.
How great a demand for sympathy.
How much inclination to self-pity.
How much pleasure in the success and enjoyment of others.
How much of a 'good loser'.
How much given to witticisms, epigrams, etc.
What tendency to emphasize the good side of the environment.
How even-natured (temper).

XII. Position Towards Reality.

What capacity to take things as they are.
What capacity to acknowledge mistakes or transgressions.
How practical.
How influenced in action by likes and dislikes.
What tendency to day-dreaming.

XIII. Sexual Sphere.

How forward toward the opposite sex.
How freely speak with intimates of own relation to question.
What is the prominence of the following sexual reactions.
Normal intercourse.
Flirtation, love affairs, spooning, etc.
Sexual trends in reading, art, conversation.
Masturbation and allied practices, sexual imagination.
Negativistic readtion (prudishness)
What degree of contentment with exciting sexual adjustments.
How dominant in sexual relationships.

XIV. Balancing factors.

How firm in religious beliefs.
How active in church work.
How intense interests or fads other than already dealt with.
To what extent are ideals expressed.
How much are they in harmony with actual trends.
How adequate a balance is the final result of these means.

L. L. Thurston
The Universit'

ıtion = _____

ːcked = _____

ɔcore = _____

APPENDIX B.

A SCALE FOR MEASURING ATTITUDE TOWARD THE CHURCH

This scale has been prepared for studying people's attitudes toward the church. You are asked merely to check all the opinions that express your own sentiments. Let your own experience with churches determine your indorsements.

1. Name: _____
(You need not sign your name if you prefer to give your opinions anonymously.)

2. Sex: Man, Woman (Underline one)

3. Age: _____

4. Religious Affiliation: None, Protestant, Roman Catholic, Jewish (Underline one)

Other: _____

5. Church Relation: Active member, Nominal member, None (Underline one)

6. Church Attendance: Regular, Frequent, Occasional, Seldom, Not at all (Underline one)

7. Education Completed: Grades 1 2 3 4 5 6 7 8, High School 1 2 3 4, College 1 2 3 4 5 6 7 (Ring one)

8. Vocation: Student, Profession, Trade, Business, Retired, Unemployed (Underline one)

Other: _____

_____

_____

Check (✓) every statement with which you fully agree:

1. I think the church is a divine institution, and it commands my highest loyalty and respect.
2. I am neither for nor against the church, but I do not believe that church-going will do anyone any harm.
3. I feel the good done by the church is not worth the money and energy spent on it.
4. I regard the church as a monument to human ignorance.
5. I believe that the church is losing ground as education advances.
6. I feel the church is trying to adjust itself to a scientific world and deserves support.
7. The teaching of the church is altogether too superficial to be of interest to me.
8. I feel the church is the greatest agency for the uplift of the world.
9. I think the church has a most important influence in the development of moral habits and attitudes.
10. I believe that the church is necessary, but like all other human institutions it has its faults.
11. I regard the church as a harmful institution, breeding narrow-mindedness, fanaticism, and intolerance.
12. The church is too conservative for me, and so I stay away.
13. I believe in the ideals of my church, but I am tired of its denominationalism.
14. I believe that the church furnishes the stimulus for the best leadership of our country.
15. I'm not much against the church, but when I cannot agree with its leaders I stay away.
16. I regard the church as hopelessly allied with reactionary forces.
17. I believe that the church practices the Golden Rule fairly well and has a consequent good influence.
18. I am interested only to the extent of attending church occasionally.
19. I feel the church is ridiculous, for it cannot give examples of what it preaches.
20. Sometimes I feel the church is worth while, and sometimes I doubt it.
21. My church is the primary guiding influence in my life.
22. I like the spiritual uplift I get from the church, but I do not agree with its theology.
23. My attitude toward the church is one of neglect due to lack of interest.

24. I believe the church is bound hand and foot with monied interests and does not practice its ideals.

25. I am sympathetic toward the church, but I am not active in its work.

26. I regard the church as a parasite on society.

27. I know too little about any church to express an opinion.

28. I regard the church as the most important institution in the world outside of the home.

29. I am slightly prejudiced against the church and attend only on special occasions.

30. I do not think a man can be honest in his thinking and indorse what the church teaches.

31. There is much wrong in my church, but I feel it is so important that it is my duty to help improve it.

32. I feel that the church promotes a fine brotherly relationship between people and nations.

33. I think the church is unreservedly stupid and futile.

34. I feel that church attendance is a good index of the nation's morality.

35. I feel the church is petty, easily disturbed by matters of little importance.

36. In the church I find my best companions and express my best self.

37. I believe the church is non-scientific, depending for its influence upon fear of God and hell.

38. I am loyal to the church, but I believe its influence is on the decline.

39. It seems absurd to me for a thinking man to be interested in the church.

40. My attitude toward the church is best described as indifference.

41. I believe that anyone who will work in a modern church will appreciate its indispensable value.

42. The church deals in platitudes and is afraid to follow the logic of truth.

43. My attitude toward the church is passive, with a slight tendency to disfavor it.

44. I have a casual interest in the church.

45. I have nothing but contempt for the church.

APPENDIX C.

ALLPORT
S-R REACTION STUDY

THE A–S REACTION STUDY

A Scale for Measuring Ascendance-Submission in Personality

Manual of Directions, Scoring Values, and Norms

BY
GORDON W. ALLPORT
AND
FLOYD H. ALLPORT

HOUGHTON MIFFLIN COMPANY
BOSTON · NEW YORK · CHICAGO · DALLAS · SAN FRANCISCO
The Riverside Press Cambridge

THE A–S REACTION STUDY[1]

Purpose

This behavior-study aims to discover the disposition of an individual to dominate his fellows (or to be dominated by them) in various face-to-face relationships of everyday life. A fairly large number of situations are verbally presented, in each of which the subject is required to select one of a group of standardized responses which most nearly characterizes his usual behavior in that situation. Not all of the responses chosen will reveal an invariable ascendance or submission, for most people show *both* types of behavior at different times and under different conditions. The study, however, has enough situations to detect which of these two types of reaction, if either, is the more characteristic; and the total score gives an expression of the dominance of the one or the other.

Instructions for Giving

1. *There are two forms of the A–S Reaction Study, one for men and one for women.* They have been separately standardized, and can not be used interchangeably.

2. *The Reaction Study is self-administering.* It may be taken in a group or individually, though it should be borne in mind that the norms have been computed from results obtained in the group situation. For this reason it is desirable to give the study, whenever feasible, to individuals in a group.

3. *There is no time limit.* Half an hour is usually sufficient time to allow; very few subjects require longer. The directions at the top

[1] For a more complete discussion of the construction of this study, the method of deriving score-values, and the theory upon which the scale is based, see "A Test for Ascendance-Submission," *Journal of Abnormal and Social Psychology*, 1928, XXIII, 2. For the relation of the trait to other physical and mental characteristics, consult the article in the same issue of the Journal by I. Bender, entitled "Ascendance-Submission in Relation to Certain Other Factors in Personality."

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of the blank forms should be read aloud, calling attention to the last provision, viz., "*if a situation seems totally unreal or impossible to respond to, you may omit it.*"

4. Attention should also be called to the fact that *sincere and thorough coöperation is required.* Unless the subject really desires to profit by the study as a means of acquiring a better knowledge of himself, accurate results cannot be expected. The person conducting the study should emphasize the fact that its purpose is not to test the subject's intelligence, good breeding, or social assets, but merely to find out *what he actually does* in certain familiar situations. It is *not* a test of knowledge, but a *study of reactions.* If the study is used in connection with a college course or industrial survey it should be pointed out that the results can in no way be used to detract from the standing of the subject. Experience with the reaction-study has shown that it has generally aroused the interest of subjects, especially if they are to be informed of their scores.

5. The error due to the subjective nature of the study can be greatly reduced if the subjects are instructed to check the items *not* on the basis of a general feeling of what they "would do" if faced with these situations, but after a careful recollection of what they actually *have done* under similar circumstances in the past.

6. It is both unnecessary and unwise to give any suggestion beforehand as to what the study is supposed to measure. *The fact that it aims to measure ascendance-submission should not be mentioned until after the subjects have finished.*

7. The experience of the authors indicates that after the study has been finished, one mistaken notion usually needs to be dispelled, namely, that ascendance is intrinsically more desirable than submission. Current opinion, to be sure, seems to place a premium upon the convincing and aggressive person, upon the one who can persuade and control others. But if one surveys one's acquaintances it appears that the submissive person is often not only socially pleasing, but in the long run as successful in his adjustments as the ascendant person. Other traits, such as expansiveness, insight, sociability, unselfishness, and, above all, intelligence in social relationships, may be present in a fundamentally submissive personality,

and may combine to produce a high degree of effectiveness in daily living.

Instruction for Scoring

In the various situations each response-choice checked is considered as having a diagnostic value for indicating ascendance or submission according to the score-values given in the following table. A *plus* score indicates responses which show ascendance, while a *minus* score denotes submissive reactions. A few responses have no diagnostic value either way. These are given a value of zero. *There are separate tables of score-values for men and for women.*

Each item should be separately scored in the margin of the page. Omissions, or items in which more than one choice is marked, count zero. *The final score is the algebraic sum of the scores for the separate items.* This score may be most conveniently obtained by adding separately the plus scores and the minus scores, and subtracting the smaller sum from the larger, retaining the sign of the larger.

Stencils may be easily prepared which will facilitate the scoring. It is also possible to dictate the score-values, allowing the subjects to score their own papers.

FORM FOR MEN

Situation	*Response-Choices*	*Score*
1	frequently	+2
	occasionally	0
	never	−4
2a	usually	+1
	occasionally	−1
	never	−1
2b	yes, usually	−1
	sometimes	−1
	no	+2
3	habitually	+1
	occasionally	0
	never	−1
4	yes, as a rule	−1
	sometimes	0
	no	+1
5a	yes	+1
	no	−2
5b	yes	−1
	no	0
6a	habitually	+4
	occasionally	+2
	rarely	−1
	never	−2
6b	very	−2
	moderately	0
	not at all	+4
7	"have it out" with the person	+2
	let it pass without feeling	−2
	take revenge indirectly	−2
	feel disturbed but let it pass	−1

Scoring Values: *Form for Men*

Situation	*Response-Choices*	*Score*
8	remonstrate with intruder	+2
	"look daggers" or make comments	−2
	decide not to wait, and go away	−3
	do nothing	−2
9	markedly	−4
	somewhat	0
	not at all	+2
10	to upbraid him	+4
	to express dissatisfaction mildly	−1
	to smother feelings entirely	0
11	rise and offer your seat	−1
	remain in seat feeling ill at ease	−2
	remain in seat without embarrassment	+1
12	take the initiative	+2
	pass it on to another	−2
	say nothing about it	−1
13	occasionally	+1
	seldom	−1
	never	−1
14	frequently	−2
	occasionally	−2
	never	+2
15	frequently	+2
	occasionally	0
	never	−1
16	determined to win in spite	+1
	not especially hopeful	−1
	inclined to admit defeat	−1
17	habitually	+3
	occasionally	0
	never	−1

Scoring Values: *Form for Men*

Situation	*Response-Choices*	*Score*
18	usually, yes	−3
	occasionally	−1
	never	+1
19	persist in attempt to sell	+2
	agree and seek further advice	−1
	become emotionally disturbed	0
	simply take leave	0
20	take full responsibility	+2
	make suggestions or agree to share	−1
	let another take the lead	−6
21a	yes	−1
	no	0
21b	yes	−1
	no	+1
21c	try to treat him the same way	+1
	behave normally, but wish	−1
	feel and behave normally	+2
22a	sometimes	+1
	rarely	0
	never	−1
22b	very much	−1
	somewhat	−1
	not at all	+3
23a	frequently	+1
	occasionally	0
	never	−1
23b	usually	+7
	sometimes	+1
	never	−2

Scoring Values: *Form for Men*

Situation	*Response-Choices*	*Score*
24	usually	+1
	occasionally	−1
	never	−1
25	in class	+3
	after class	−1
	not at all	−3
26	take an active part in assisting	+2
	take the part of a spectator	−2
	leave the scene at once	−2
27	quite difficult	−4
	moderately difficult	−1
	not at all difficult	+1
28	call his attention to the fact	+1
	wait silently, perhaps injured air	−1
	go out to another store	0
29	frequently	+2
	occasionally	0
	never	−1
30a	more than three	+3
	one to three	+1
	none	−2
30b	more than six	+6
	one to six	0
	none	−6
31	maintain views in argument	+1
	conciliate opponent	0
	agree, at least verbally	−4
32	openly	+2
	surreptitiously	−1
	not at all	0
33	usually	−1
	sometimes	0
	rarely	+1

FORM FOR WOMEN

Situation	*Response-Choices*	*Score*
1	frequently	−4
	occasionally	+1
	never	0
2a	usually	+1
	occasionally	0
	never	−2
2b	yes, usually	−3
	sometimes	0
	no	+3
3	habitually	+3
	occasionally	0
	never	−1
4a	yes	0
	no	+1
4b	frequently	+3
	occasionally	0
	never	0
4c	no	+2
	somewhat	+1
	very much	−1
5a	yes	+1
	no	−1
5b	yes	0
	no	+1
6a	usually	+5
	occasionally	+1
	rarely	0
	never	−4
6b	very	−2
	moderately	+1
	not at all	+2
7	"have it out" with person	+2
	let it pass without feeling	0
	feel disturbed but let it pass	−1

Scoring Values: *Form for Women*

Situation	*Response-Choices*	*Score*
8	usually	−3
	occasionally	0
	never	+1
9	remonstrate with intruder	+4
	call attention of man	−5
	"look daggers" or comment	−1
	decide not to wait	−1
	do nothing	+2
10	markedly	−1
	somewhat	−1
	not at all	+4
11	upbraid him	+3
	express dissatisfaction mildly	0
	smother feelings entirely	−2
12	invariably	+4
	occasionally	−1
	never	−3
13	frequently	+3
	occasionally	−1
	never	−1
14	frequently	−3
	occasionally	+1
	never	+2
15	frequently	+4
	occasionally	+1
	never	−1
16a	frequently	+4
	occasionally	0
	never	−4
16b	occasionally	−1
	once or twice	+1
	never	+1
17	sometimes	−1
	no	+1
18	usually	+3
	occasionally	−1
	seldom	−2

Scoring Values: *Form for Women*

Situation	*Response-Choices*	*Score*
19a	certainly	+1
	perhaps	0
	no	−4
19b	yes	0
	no	+1
20	more than six times	+9
	less than six, more than once	+1
	only once	−1
	never	−4
21a	younger than self	−3
	older than self	+1
	about same age	0
21b	younger than self	−4
	older than self	+1
	about same age	0
22a	yes	0
	no	+1
22b	yes	+1
	no	0
22c	try to treat him same way	+2
	behave normally, but wish	−1
	feel and behave normally	+1
23a	sometimes	+1
	rarely	−1
	never	0
23b	very much	−2
	somewhat	0
	not at all	+5
24a	frequently	0
	occasionally	+1
	never	+2
24b	usually	+5
	sometimes	+1
	never	−2
25a	yes	+1
	perhaps	−2

Scoring Values: *Form for Women*

Situation	*Response-Choices*	*Score*
25b	yes	0
	no	+1
26	usually	+1
	occasionally	−1
	never	−3
27	in class	+2
	after class	+1
	not at all	−3
28	taken active part	+1
	taken part of spectator	−2
	left scene at once	−3
29a	no	+1
	one	−2
	a number	0
29b	yes	+1
	no	−2
30	yes	+6
	no	−2
31	frequently	0
	occasionally	+1
	never	−1
32	frequently	+1
	occasionally	+1
	never	−2
33	very much	+1
	somewhat	0
	not at all	+2
34	very	−2
	somewhat	−2
	not at all	+2
35	usually	+3
	sometimes	0
	never	−2

Tentative Norms

Final scores should be referred to the following table of tentative norms which are based on 727 cases for the Form for Men and 120 cases for the Form for Women. It should be borne in mind that these norms are derived from the three upper college classes. Other age and occupational groups may require somewhat different standards for comparison.

Decile	Degree of Ascendance-Submission	Form for Men	Form for Women
1	A 4	+81 (+64*) to +24	+112 (+59*) to +47
2	A 3	+23 to +16	+46 to +35
3	A 2	+15 to +10	+34 to +28
4	A 1	+ 9 to + 6	+27 to +19
5	Average	+ 5 to + 1	+18 to +16
6	Average	0 to − 4	+15 to +11
7	S 1	− 5 to −10	+10 to + 7
8	S 2	−11 to −17	+ 6 to 0
9	S 3	−18 to −24	− 1 to −13
10	S 4	−25 to (−55*) −79	−14 to (−50*) −91

Central Tendencies

	Form for Men	Form for Women
Mean	−0.35	+16.2
Median	0.00	+15.4

* Figures marked with asterisk indicate the extreme values actually obtained with the A–S Reaction Study.

Reliability and Validity

For a discussion of the reliability and validity of the study the reader is referred to the article cited at the beginning of this pamphlet. It is sufficient here to record the approximate reliability for the Form for Men as .74, for the Form for Women, .78. Concerning validity, there is greater question, owing to the lack of a suitable criterion for validation. Using ratings, a criterion notably subject to error, various correlations have yielded coefficients ranging from + .29 to + .79. The ultimate validity of the study will in all probability be established only in terms of its practical success in vocational guidance, clinical and personnel work, and other forms of personality study.

Suggested Uses

Cautions. It is strongly urged that the scores obtained from the use of the A–S Reaction Study should be regarded as suggestive rather than conclusive. Those who wish to make practical use of these scores should

bear in mind (a) the need of further standardization based upon additional cases, (b) the need of validation by other criteria of ascendance-submission, and (c) personality factors other than ascendance-submission which are present in most social relationships. An example of the point last mentioned is to be found in leadership; for individuals often qualify as leaders through intelligence, executive ability, literary capacity, or other traits which may be quite independent of ascendance-submission. It is the hope of the authors that the present study may be used primarily as a basis of future research in the measurement of personality, rather than as a hard and fast criterion for social guidance.

With these precautions in mind, a few suggestions may be made for those who are interested in some practical or theoretical application of the study. Such possible uses may be described under the heads of self-knowledge, suggestions for choice of vocation, suggestions for vocational placement, and classroom and research technique.

Self-knowledge. An individual who desires a better understanding of himself and an evaluation of his traits may profit by the use of the A–S Reaction Study, since it affords him an objective basis of comparison with other persons of his own class. This gain in insight will be greater when the ascendance score is supplemented by interviews with instructors, personnel officers, or associates with whom one can discuss personal questions in an objective manner.

Suggestions for Choice of Vocation. The following are to be considered merely as common-sense estimates of the vocations in which ascendance or submission would be useful qualities. Each of these vocations requires special capacities or social traits in addition to ascendance-submission. The A–S Reaction Study score may of course be suggestive; but no one should use it in undertaking vocational guidance without due consideration of these other factors.

A young woman with a submissive score might not find herself at a disadvantage in such occupations as librarianship, nursing, secretarial or clerical work, editorial work, domestic science, dentistry, dress-designing or millinery, pharmacy, teaching, statistics, research, or any form of literary or artistic activity. On the other hand, women with high scores, *if they have other requisite qualifications*, might safely consider salesmanship, social work, reportorial work, the management of clubs, tearooms or stores, law, medicine, personnel work, soliciting, or executive and administrative

work. Men with submissive scores, *other traits being favorable*, might logically consider college teaching, architecture, art, farming, bookkeeping, banking, dentistry, editing, writing, music, secretaryship, mechanics, etc Those who are ascendant in their scores would perhaps have a special advantage in salesmanship, executive work, factory management, law, politics, organizing, and kindred occupations.

Suggestions for Vocational Placement. The reaction study may be found to possess a certain utility in personnel administration. Salesmen, working foremen, and industrial executives, at least in many cases, may well be chosen from among ascendant personalities. The present test, though designed primarily for college students, may serve as a partial criterion by which to determine fitness for executive appointments or training. Until occupational norms are available it is important to remember that the present standards apply only to college age; and the expectation is probably reasonable that ascendance-submission varies with age. Higher scores than those given in the table of norms may therefore be found. It is well to remember that ascendance as measured by this study means only a tendency to dominate in the *face-to-face* situations of life. Inasmuch as it refers wholly to the immediate social contacts made by the individual, it must not be confused with executive ability or leadership in the broader sense. The whole bearing, moreover, of ascendance and submission upon success in various vocations must be considered as tentative until further research has been accomplished.

Classroom and Research Uses. The authors have found the A–S Reaction Study serviceable and interesting when used in courses in elementary psychology, social psychology and the psychology of personality. They hope also that it may contribute to the technique of investigations in leadership and similar sociological fields. In personality research in which it is desired to determine the ascendance of individuals for purposes of correlation the present study may take the place of rating scales, affording a more convenient and perhaps a more accurate measurement of the trait concerned.

Communications

It is probable that revised norms will be published in the future, including an account of scores obtained from other age and occupational groups. If users of the A–S Reaction Study will send in a statement of the distribution of scores and of the nature of the group to which the scale was given, grateful acknowledgment will be made for this assistance. Correlations

obtained, criticisms, and other results of experience with the study will be likewise welcomed. Address communications to G. W. Allport, Dartmouth College, Hanover, N.H.

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NAME_____ SCORE_____

AGE_____ *Form for Men*

A–S REACTION STUDY

DIRECTIONS: Most of these situations will represent to you your own actual experiences. Reply to the questions spontaneously and truthfully by checking the answer which most nearly represents your usual reaction. If a situation has not been experienced, endeavor to feel yourself into it and respond on the basis of what you believe your reaction would be. If the situation seems totally unreal or impossible to respond to, you may omit it.

1. In witnessing a game of football or baseball in a crowd, have you intentionally made remarks (witty, encouraging, disparaging, or otherwise) which were clearly audible to those around you?

   frequently_____

   occasionally_____

   never_____

2. a) At a reception or tea do you seek to meet the important person present?

   usually_____

   occasionally_____

   never_____

   b) Do you feel reluctant to meet him?

   yes, usually_____

   sometimes_____

   no_____

3. At church, a lecture, or an entertainment, if you arrive after the program has commenced and find that there are people standing, but also that there are front seats available which might be secured without "piggishness" or discourtesy, but with considerable conspicuousness, do you take the seats?

   habitually_____

   occasionally_____

   never_____

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4. A salesman takes manifest trouble to show you a quantity of merchandise; you are not entirely suited; do you find it difficult to say "No"?

yes, as a rule_____

sometimes_____

no_____

5. a) Have you solicited funds for a cause in which you are interested?

yes_____

no_____

b) Do you feel reluctant to do such soliciting?

yes_____

no_____

6. a) A professor or lecturer asks any one in the audience, say of 20 or more people, to volunteer an idea to start discussion. You have what appears to be a good idea, do you speak out?

habitually_____

occasionally_____

rarely_____

never_____

b) Do you feel self-conscious when you speak under such circumstances?

very_____

moderately_____

not at all_____

7. You have heard indirectly that an acquaintance has been spreading rumors about you which, though not likely to be serious in consequence, are nevertheless unjustified and distinctly uncomplimentary. The acquaintance is an equal of yours in every way. Do you usually

"have it out" with the person_____

let it pass without any feeling_____

take revenge indirectly_____

feel disturbed but let it pass_____

8. Some one tries to push ahead of you in line. You have been waiting for some time, and can't wait much longer. Suppose the intruder is the same sex as yourself, do you usually

remonstrate with the intruder_____

"look daggers" at the intruder or make clearly audible comments to your neighbor_____

decide not to wait, and go away_____

do nothing_____

9. Do you feel self-conscious in the presence of superiors in the academic or business world?

markedly_____

somewhat_____

not at all_____

10. Some possession of yours is being worked upon at a repair shop. You call for it at the time appointed, but the repair man informs you that he has "only just begun work on it." Is your customary reaction

to upbraid him_____

to express dissatisfaction mildly_____

to smother your feelings entirely_____

11. After a very tiring day you decide to keep your seat in a crowded street-car even though ladies have to stand. You overhear one of the ladies refer to the situation in some remark to her companion. Do you

rise and offer your seat_____

remain in your seat feeling ill at ease_____

remain in your seat without embarrassment_____

12. You are at a mixed party where about half the people are friends of yours. The affair becomes very dull, and something should be done to enliven it. You have an idea. Do you usually

take the initiative in carrying it out_____

pass it on to another to put into execution_____

say nothing about it_____

13. When you are served a tough steak, a piece of unripe melon, or any other inferior dish at a high class restaurant, do you complain about it to the waiter?

occasionally_____

seldom_____

never_____

14. Have you crossed the street to avoid meeting some person?

frequently_____

occasionally_____

never_____

15. Have you haggled over prices with tradesmen or junk men?

frequently_____

occasionally_____

never_____

16. In tennis or any similar competition when you are pitted against some one considerably superior to you in this particular ability, are you as a rule

determined to win in spite of his advantage_____

not especially hopeful, but unwilling to concede defeat at the start_____

inclined to admit to yourself defeat at the outset, hoping only to make a presentable score_____

17. You desire to board a boat or train to see a friend off, or to enter an exhibition or park; the guard forbids you on what seem to be entirely unnecessary technicalities, do you argue with him and bluff your way past?

habitually_____

occasionally_____

never_____

18. When you were 10 or 12 years of age were you the "goat" for your playmates? (e.g., in playing war would they force you to fight on the unpopular side?)

usually, yes_____

occasionally_____

never_____

19. Suppose you have recently become a salesman and are trying to sell life insurance to a middle-aged financier of great note. He says, "Young man, I don't know how long you have been in this game, but you will never succeed unless you acquire more experience and confidence in yourself." What will be your reaction?

to persist in the attempt to sell insurance_____

to agree and seek further advice from him_____

to become emotionally disturbed in your reply, — angry, embarrassed, or condescending_____

simply to take leave_____

20. You are with a group of people in the woods, and although not certain of the path, you probably know as much about it as anyone present. Do you take responsibility of guiding the group?

take the full responsibility_____

make suggestions or agree to share the responsibility_____

let another take the lead according to his judgment_____

21. a) If you feel a person is dictatorial and domineering, do you as a rule make it a point to avoid him?

yes_____

no_____

b) If unavoidably thrown with him at a gathering, do you feel annoyed?

yes_____

no_____

c) Do you usually

try to treat him the same way he treats you___ ___

behave normally, but wish either you or he had not come_____

feel and behave normally_____

22. a) When you see some one in a public place or crowd whom you think you have met or known, do you inquire of him whether you have met before?

sometimes_____

rarely_____

never_____

b) Are you embarrassed if you have greeted a stranger whom you have mistaken for an acquaintance?

very much_____

somewhat_____

not at all_____

23. a) Have you ever been made to feel antagonistic or irritated on account of the "bossy" way a chairman conducts a meeting?

frequently_____

occasionally_____

never_____

b) Do you take the initiative in opposing such a person?

usually_____

sometimes_____

never_____

24. If a student in class discussion makes a statement that you think erroneous, do you question it?

usually_____

occasionally_____

never_____

25. If you hold an opinion the reverse of that which the lecturer has expressed in class, do you usually volunteer your opinion

in class_____

after class_____

not at all_____

26. When an accident occurs where many people are present besides yourself do you usually

take an active part in assisting_____

take the part of a spectator_____

leave the scene at once_____

27. When a book-agent or insurance salesman comes to your home or to your room, do you as a rule find it difficult to refuse to listen to him, or to get rid of him as soon as the purpose of his visit becomes clear?

quite difficult_____

moderately difficult_____

not at all difficult_____

28. When the clerk in a store where you have been waiting for some time for service overlooks you and waits on a customer who has come into the store after you, do you as a rule

call his attention to the fact_____

wait silently, though perhaps with an injured air_____

go out to another store_____

29. Have you ever felt that a professor talks too much in class and should give you more chance to express your views and conclude points?

frequently_____

occasionally_____

never_____

30. a) Have you largely on your own initiative in the past five years organized clubs, teams, or other such groups?

more than three_____

one to three_____

none_____

b) Have you within the past five years been recognized as leader (president, captain, chairman) of groups?

more than six_____

one to six_____

none_____

31. In conversing with a person older than yourself whom you respect, on an issue about which you disagree, do you characteristically

maintain your views in argument_____

conciliate your opponent by seeming to agree with him, and yet try indirectly to carry your point_____

agree with him, at least verbally, and let it go at that_____

32. You are dining with a young lady whom you are trying to impress. The waiter presents a bill which is slightly larger than you expected it to be. Do you verify the bill before paying it?

openly_____

surreptitiously_____

not at all_____

33. A friend with whom you are not particularly intimate has a racquet, skates, skis, or some similar article which you would like very much to borrow for an afternoon. Do you feel a hesitation in asking for it?

usually_____

sometimes_____

rarely_____

NAME_____ SCORE_____

AGE_____ *Form for Women*

A – S REACTION STUDY

DIRECTIONS: Most of these situations will represent to you your own actual experiences. Reply to the questions spontaneously and truthfully by checking the answer which most nearly represents your usual reaction. If the situation has not been experienced, endeavor to feel yourself into it and respond on the basis of what you believe your reaction would be. If a situation seems totally unreal or impossible to respond to, you may omit it.

1. At a hairdressers are you persuaded to try new shampoos and new styles of hairdressing?

   frequently_____

   occasionally_____

   never_____

2. a) At a reception or tea do you seek to meet the important person present?

   usually_____

   occasionally_____

   never_____

   b) Do you feel reluctant to meet him?

   yes, usually_____

   sometimes_____

   no_____

3. At church, a lecture, or an entertainment, if you arrive after the program has commenced and find that there are people standing but also that there are front seats available which might be secured without "piggishness" but with considerable conspicuousness, do you take the seats?

   habitually_____

   occasionally_____

   never_____

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4. a) A salesman takes manifest trouble to show you a quantity of merchandise. You are not entirely suited. Do you find it difficult to say "No"?

yes_____

no_____

b) Do you take articles you have bought back to stores?

frequently_____

occasionally_____

never_____

c) Do you mind taking them back?

no_____

somewhat_____

very much_____

5. a) Have you been asked, or have you volunteered to solicit funds for a cause in which you are interested?

yes_____

no_____

b) Do you feel reluctant to do such soliciting?

yes_____

no_____

6. a) A professor or lecturer asks any one in the audience, say of 50 people, to volunteer an idea to start discussion. You have what appears to be a good idea, do you speak out?

usually_____

occasionally_____

rarely_____

never_____

b) Do you feel self-conscious when you speak under such circumstances?

very_____

moderately_____

not at all_____

7. You have heard indirectly that an acquaintance has been spreading rumors about you which, though not likely to be serious in consequence, are nevertheless unjustified and distinctly uncomplimentary. The acquaintance is an equal of yours in every way. Do you usually

"have it out" with the person_____

let it pass without any feeling_____

feel disturbed but let it pass_____

8. Beggars solicit you with hard luck stories; do you give them money?

usually_____

occasionally_____

never_____

9. Some one tries to push in ahead of you in line. You have been waiting for some time, and can't wait much longer. Suppose the intruder is the same sex as yourself, do you usually

remonstrate with the intruder_____

call the attention of the man at the ticket window_____

"look daggers" at the intruder or make clearly audible comments to your neighbor_____

decide not to wait, and go away_____

do nothing_____

10. Do you feel self-conscious in the presence of superiors in the academic or business world?

markedly_____

somewhat_____

not at all_____

11. Some possession of yours is being worked upon at a repair shop. You call for it at the time appointed, but the repair man informs you that he has "only just begun work on it." Is your customary reaction

to upbraid him_____

to express dissatisfaction mildly_____

to smother your feelings entirely_____

12. At a stupid party something must be done to injeet some life. You have an idea. Do you take the initiative in earrying it out?

invariably_____

occasionally_____

never_____

13. Have you worn knickers or followed any style of dress merely because you wished to, even though you knew that the practiee would be commented on, since the innovation you proposed was not aecording to custom?

frequently_____

occasionally_____

never_____

14. Have you crossed the street to avoid meeting some person?

frequently_____

occasionally_____

never_____

15. Have you haggled over prices with tradesmen or junk men?

frcquently_____

occasionally_____

never_____

16. a) Have you appeared as leeturer or entertainer before gatherings of over ten people?

frequently_____

occasionally_____

never_____

b) Have you experienced "stage fright"?

occasionally_____

once or twice_____

never_____

17. If you made purchases at Woolworth's or at the bargain counters, would you mind your friends knowing it?

sometimes_____

no_____

18. In playing games when young, did you take the lead and decide what the group should play?

usually_____

occasionally_____

seldom_____

19. a) If you are sitting between two young men on a crowded street car, and a woman of about fifty-five enters the car, and stands in front of you; and if neither of the young men gets up, will you rise to offer her your seat?

certainly_____

perhaps_____

no_____

b) Will you feel any embarrassment in carrying out your decision?

yes_____

no_____

20. Have you been president or recognized leader of an organized group composed of girls or women?

more than six times_____

less than six times but more than once_____

only once_____

never_____

21. a) In general, are your most intimate friends

younger than yourself_____

older than yourself_____

about the same age_____

b) Do you feel more at ease as a rule, in the company of those

younger than yourself_____

older than yourself_____

about the same age_____

22. a) If you feel a person is dictatorial and domineering, do you as a rule make it a point to avoid him?

yes_____

no_____

b) If unavoidably thrown with him at a gathering, do you feel much annoyed?

yes_____

no_____

c) Do you usually

try to treat him the same way he treats you_____

behave normally, but wish either you or he had not come_____

feel and behave normally_____

23. a) When you see some one in a public place or crowd whom you think you have met or have known, do you inquire of him whether you have met before?

sometimes_____

rarely_____

never_____

b) Are you embarrassed if you have greeted a stranger whom you have mistaken for an acquaintance?

very much_____

somewhat_____

not at all_____

24. a) Have you ever been made to feel antagonistic or irritated on account of the "bossy" way a chairman conducts a meeting?

frequently_____

occasionally_____

never_____

b) Do you take the initiative in opposing such a person?

usually_____

sometimes_____

never_____

25. a) If you have broken or lost a tennis racquet, or some such article, belonging to another person, would you tell him right away?

yes_____

perhaps_____

b) Would you feel a desire to delay telling him?

yes_____

no_____

26. If a student in class discussion makes a statement that you think erroneous, do you question it?

usually_____

occasionally_____

never_____

27. If you hold an opinion the reverse of that which the lecturer has expressed in class, do you usually volunteer your opinion

in class_____

after class_____

not at all_____

28. If you have been in accidents or fires at school or elsewhere, where there were several persons present, have you as a rule

taken an active part in assisting_____

taken the part of a spectator_____

left the scene at once_____

29. a) Have you had a "crush" in college?

no_____

one_____

a number_____

b) Do you dislike "crushes"?

yes_____

no_____

30. Have you ever attempted so many activities at college that you were forced to give something up?

yes_____

no_____

31. If you have prepared your lesson, and the professor calls on girls all around you but does not give you a chance to recite, do you feel irritated?

frequently_____

occasionally_____

never_____

32. Have you ever felt that a professor talks too much in class and should give you more chance to express your views and conclude points?

frequently_____

occasionally_____

never_____

33. If the majority of your friends are having new costumes for a dance, are you disturbed by having to wear an old frock; one that you know will be recognized?

very much_____

somewhat_____

not at all_____

34. Do you find it difficult to ask a gentleman to accompany you to college dances?

very_____

somewhat_____

not at all_____

35. In a mixed social group where many people are strangers to each other, do you constitute yourself a hostess and begin introductions and conversation?

usually_____

sometimes_____

never_____

APPENDIX D.

DOWNEY

WILL-TEMPERAMENT

TESTS

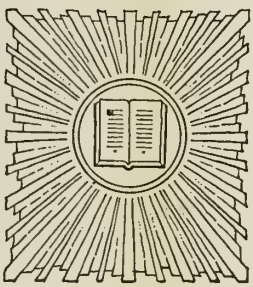
1. Name..... (First name) (Last name)
2. Boy or girl (or man or woman)..... Grade.....
3. Age last birthday.....years Birthday..... (Month) (Day)
4. Teacher.....
5. School (or education).....
6. City or town..... State.....
7. Date of this test .....

DOWNEY GROUP WILL-TEMPERAMENT TEST

By JUNE E. DOWNEY
Professor of Psychology, University of Wyoming

WORLD BOOK COMPANY: PUBLISHERS
Yonkers-on-Hudson, New York

TEST



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1 Draw a line under the word in each pair which more nearly describes you. Take the pairs in order. *Don't skip any.* Speed doesn't count.

1	Careful	Careless
2	Daring	Cautious
3	Ambitious	Unambitious
4	Selfish	Unselfish
5	Punctual	Tardy
6	Bad-tempered	Sweet-tempered
7	Accurate	Inaccurate
8	Industrious	Lazy
9	Vain	Modest
10	Constant	Changeable
11	Indifferent	Enthusiastic
12	Firm	Yielding
13	Trustful	Distrustful
14	Cowardly	Brave
15	Clever	Stupid
16	Good Memory	Bad Memory
17	Self-distrustful	Self-confident
18	Hasty	Deliberate
19	Observant	Unobservant
20	Sociable	Unsociable
21	Orderly	Disorderly
22	Gloomy	Cheerful
23	Patient	Impatient
24	Quick in thought	Slow in thought
25	Quick in movement	Slow in movement
26	Ready to forgive	Holds a grudge
27	Fond of a fight	Avoids a fight
28	Extravagant	Saves money
29	Humble	Proud
30	Generous	Stingy

II Write your name as directed below. Write it again and again until the signal to stop.

1 *Usual style and speed.*

2 *As rapidly as possible.*

III Write your name *as slowly as possible.* If you finish before the signal, begin again.

IV Memory Test.

V Write "United States of America" on the line below *as quickly as possible. Both speed and not running over the line count.*

VI Write "United States of America" as directed below. *Write it again and again until the signal to stop.*

1 *Usual style and speed.*

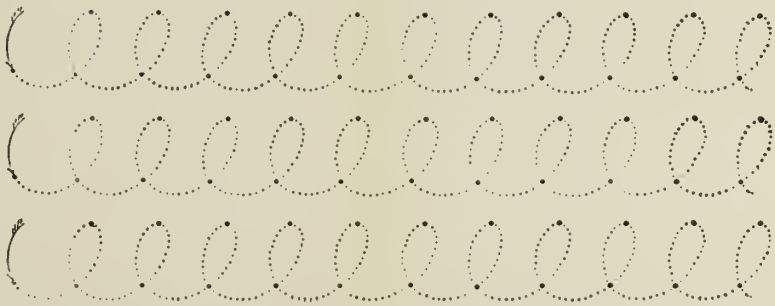
2 *As rapidly as possible.*

VII Trace *as slowly as possible* the scroll below. 3 trials.

1

2

3



VIII Disguised writing.

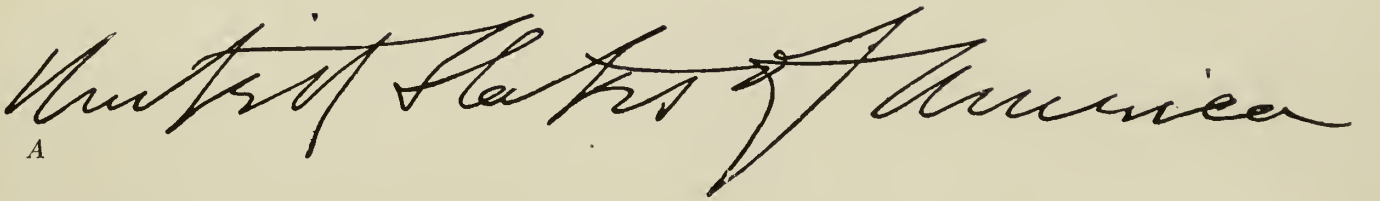
1 Write "United States of America," *in a hand very unlike your own. You need not hurry.*

2 Practice disguising your hand, and then write "United States of America" again. *Change your writing as much as possible.*

Number [ ]

Use this page for practice.

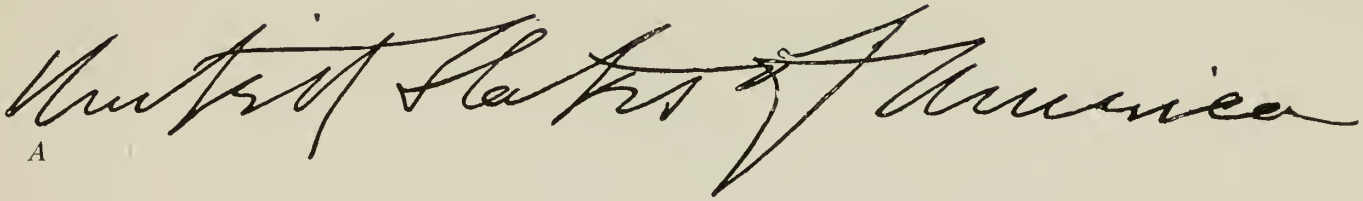
3 Imitate Model A, writing *as rapidly as possible.* Copy it as many times as you can before the signal to stop.



A

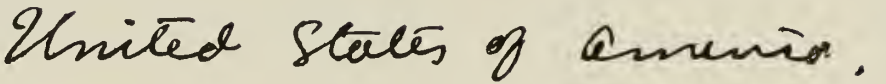
IX Copy the handwriting below as directed.

1 Copy Model A *as exactly as you can.* Go slowly and work carefully. If you finish before the signal to stop, begin again.



A

2 Copy Model B *as well as you can.* Choose your own speed. If you finish before the signal to stop, begin again.



B

XIII Make any changes you care to in checking Test 1. Do not check any traits *in addition* to those you checked in the first place.

Number [ ]

	0	1	2	3	4	5	6	7	8	9	10
A. Speed of Movement VI–1											
B. Freedom from Load VI–1, 2 . . .											
C. Flexibility VIII											
D. Speed of Decision I											
E. Motor Impulsion X											
F. Self-confidence XI											
G. Non-compliance XII											
H. Finality of Judgment XIII											
I. Motor Inhibition VII											
J. Interest in Detail IX											
K. Coördination of Impulses V . . .											
L. Volitional Perseveration VIII–2 .											
	0	1	2	3	4	5	6	7	8	9	10

DOWNEY GROUP WILL-TEMPERAMENT TEST

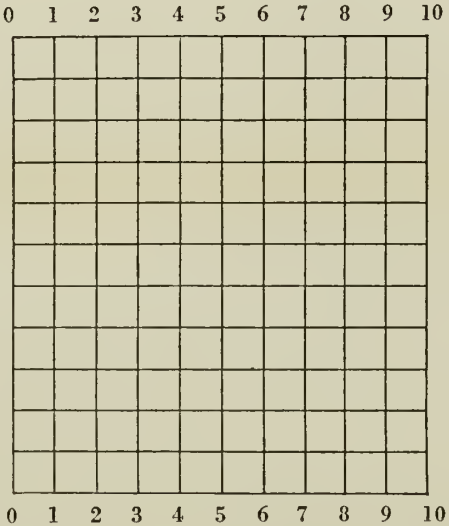
Devised by June E. Downey, Ph.D.

RECORD CARD

Name..... No.....

Address .....

A. Speed of Movement VI–1 . . . . .
B. Freedom from Load VI–1, 2 . . . .
C. Flexibility VIII . . . . . .
D. Speed of Decision I . . . . . .
E. Motor Impulsion X . . . . . .
F. Self-confidence XI . . . . . .
G. Non-compliance XII . . . . . .
H. Finality of Judgment XIII . . . . .
I. Motor Inhibition VII . . . . . .
J. Interest in Detail IX . . . . . .
K. Coördination of Impulses V . . . .
L. Volitional Perseveration VIII–2 . .



Date.....

Age.....Sex.....

Grade (or Education).....

Total Score.....IQ.....

Type: *Quick*, *Forceful*, *Slow*, *Careful*, *Balanced*, *Atypical*.

Remarks .....

.....

....

WORLD BOOK COMPANY: PUBLISHERS

Yonkers-on-Hudson, New York

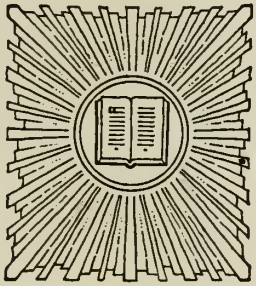
DOWNEY GROUP WILL-TEMPERAMENT TEST

Devised by JUNE E. DOWNEY, PH.D.
Professor of Psychology, University of Wyoming

WORLD BOOK COMPANY: PUBLISHERS
Yonkers-on-Hudson, New York

MANUAL OF DIRECTIONS

First Revision



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DGWTT: M–6

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MANUAL OF DIRECTIONS

INTRODUCTION

The author advises examiners to give and score the individual form of the test before attempting to administer the group form. For a discussion of the significance of the tests and of the will-profile, see the manual accompanying the individual form of the test and the author's *The Will-Temperament and Its Testing.*[1]

The group form of the will-temperament test is scored on the basis of the amount of work done in a prescribed time, instead of on the basis of the time needed to accomplish a prescribed task, as in the individual form. Except for the modifications made necessary by this different method of scoring, the two forms of the test parallel each other very closely. Two items of the individual form could not be adapted for group use. For Resistance to Opposition a test for Self-confidence has been substituted; for Reaction to Contradiction, a Non-compliance test.

DIRECTIONS FOR GIVING THE GROUP TEST

See that each subject is provided with two pencils. One may break in the middle of a test. Erasers are not needed.

Always give the oral directions exactly according to instructions. In the beginning say:

"Please fill in the blank on the front of the examination booklet, but do nothing more until directions are given."

When all have finished, say:

"This is not an intelligence test, but it is absolutely necessary that you follow directions exactly. Sometimes you will be asked to work rapidly, sometimes slowly, sometimes at your natural speed. Follow these directions precisely. Begin *always* exactly at the signal and stop *immediately* when I say, 'Stop,' without finishing what you are doing. If in the middle of a word, stop there. Don't take time even to finish a letter when the signal to stop is given. Is this clear? After the test begins, you will not be allowed to ask questions."

Test I. Speed of Decision

"Turn over the page to Test I. Notice that there are two columns of words. They run in pairs, thus: Careful.....careless; Daring.....cautious; Ambitious.....unambitious, etc.

"You are to draw a line under the word in each pair which more nearly describes *you. Underline one word or the other in every pair;*

[1] Published by World Book Company, Yonkers-on-Hudson, New York.

one always describes you better than the other. Take the pairs in order; *don't skip any.* Take your time. Speed doesn't count. Ready — Begin."

(Time limit: 45 seconds.)

When the time is up, say "Stop." This signal is to be given sharply and promptly at the end of each test.

Test II. Freedom from Load

1. "Now turn to Test II, Writing your Name. Under '1' you are to write your name *as you sign it ordinarily,* in your usual style and at your usual speed — just the way you naturally write it. Keep on writing your name until told to stop. When you finish it, *don't pause, but begin again at once.* Keep on writing it again and again until told to stop. Ready — Begin."

The examiner should emphasize the above instruction and enforce it absolutely. There is a strong tendency to stop at the completion of each writing of the name.

(Time limit: 20 seconds.)

2. "Under '2' you are to write your name *just as rapidly as you possibly can.* Write it just as many times as you can from the instant I give the signal to begin until I give the signal to stop. Ready — Go."

The examiner should give a suggestion of speed in reading the directions. "*Ready — Go*" should be given *with a snap.*

(Time limit: 20 seconds.)

Test III. Writing Name at Retarded Speed

"In Test III you are to write your name *just as slowly as you possibly can* without stopping the movement of the pencil. Remember that you are to write very, very slowly. If you finish your name once, begin on it a second time. Use a sharp pencil. Ready — Start."

The examiner gives the idea of retarded movement by drawling the directions.

(Time limit: 20 seconds.)

Test IV. Memory Test

"Now you may rest your hand a moment. Pencils up, please. Listen to me. I am going to read you a list of 10 words. You are to remember them so as to be able to report on them at the end of the test. *You must also watch very carefully everything that I*

do while I am reading the words, for I shall ask you questions about my actions."

Examiner now reads slowly (one word a second) from an oblong white card the list of words given below. He stands while reading, holds the card in the left hand, holds a pencil in the right hand, and taps at every word read. The list of words is as follows:

Book, Collar, Muff, Ice, Stove, Collar, Bluff, Mountain, Bird, Rose.

"Now listen again. I am going to read the list a second time. Notice the *first* and *last* word; and notice also if any word is *repeated* in the list, whether any words *rime* (that is, end in the same sound), and *how many* begin with *B*."

After the second reading, which in every detail should duplicate the first reading, the examiner puts the card into an envelope deliberately and sits down.

Test V. Coördination of Impulses

"Turn the page to Test V. Look at the short line. You are to write on that short line, *just as rapidly as you can*, the words 'United States of America.' Write out the words in full and remember there are two things you *must* do: *you must write very rapidly, and you must keep from running over the line.* Ready — Go."

(Time limit: 7 seconds.)

Test VI. Speed of Movement and Freedom from Load

1. "Test VI is like one you have already had. Under '1' write 'United States of America' in your *usual* style and at your *usual* speed. Write continuously from the signal to begin until the signal to stop. Don't hurry, but remember to write the phrase repeatedly until I tell you to stop. *Don't pause between words or phrases.*[1] Write at the speed at which you naturally write, and keep writing all the time. Ready — Begin."

(Time limit: 20 seconds.)

2. "Under '2' write 'United States of America' *just as rapidly* as you can and as many times as it is possible from the signal to begin until the signal to stop. Don't pause between words;[1] remember to write just as rapidly as possible. Ready — Go."

[1] The examiner must be sure that this instruction is understood. There is a strong tendency to pause at the end of each word and phrase.

As in Test II, the examiner should suggest speeding by voice and manner.

(Time limit: 20 seconds.)

Test VII. Motor Inhibition

1. "Turn to Test VII. Under '1' you are to move your pencil along the dotted line *just as slowly as you possibly can* and still keep the pencil moving. Trace the scroll as if you were writing, but do it *very, very slowly.* Be sure that your pencil keeps moving all the time. Ready — Begin."

The examiner should suggest retardation by drawling the directions.

(Time limit: 30 seconds.)

2. "Now under '2' try a second time. *Move the pencil just as slowly as you can without stopping it.* Most persons go more slowly on a second trial. Ready — Begin."

(Time limit: 1 minute, 30 seconds.)

3. "Try once more. This is your last chance; do your very best. Some persons can spend 10 minutes writing their names. *Go as slowly as you possibly can.* Ready — Begin."

(Time limit: 2 minutes, 30 seconds.)

Test VIII. Flexibility and Volitional Perseveration

1. "Turn the page to Test VIII, Disguised Handwriting. Under '1,' write 'United States of America' in a style very unlike your usual one. Change your writing so much that none of your friends would know it. Ready — Begin."

(Time limit: 50 seconds.)

2. "Before writing under '2' you are to practice on page 7 disguising — that is, changing — your writing of 'United States of America' until you get a disguise that would deceive a handwriting expert.

"When you are satisfied with your disguise, look up at the blackboard, where I shall be writing a column of numbers, and note the first number that I write *after you look up.* Write this number in the space where it says, 'Number' on page 6.

"Then under '2' write 'United States of America' in the disguised hand you have worked out. Begin now with your practice on page 7."

At this point the examiner should note the time by his watch, and at the end of 5 seconds he should write the number 5 on the blackboard. At the end of each succeeding 5 seconds he should write the number of seconds which have elapsed, in a column which will appear thus:

5
10
15
20 etc., up to 360

(Time limit: 6 minutes.)

If at the end of the 6 minutes some are still practicing and have not written the phrase opposite 2, tell them that this may be omitted, but that they shall write the number 360 in the square on page 6.

3. "Turn the page to Test VIII, 3. Observe the way 'United States of America' is written. Under '3' you are to imitate the writing *just as rapidly as you can.* Write the same size as the sample and copy it over and over until the signal is given to stop. Don't pause after one copying before beginning a second time."

(Time limit: 1 minute.)

Test IX. Interest in Detail

1. "In Test IX, 1, you are to copy Model A *just as exactly as possible.* Speed doesn't count. Work carefully, and make as good a copy as you can. If you should finish before the signal, be sure to begin a second time. Ready — Begin."

(Time limit: 1 minute.)

2. "Under '2' copy Model B as well as you can, rapidly or slowly, as you prefer. Just choose your own speed. If you finish one copy, begin a second, and if you finish a second, begin a third time. Ready — Start."

(Time limit: 1 minute, 15 seconds.)

Test X. Motor Impulsion

1. "Turn the page to Test X. You must follow directions *very* carefully. Under '1' write your name just as you wrote it in Test II, at your usual speed and in your usual style. Write it over and over again just the way you naturally write it, until the signal to stop. Ready — Go."

(Time limit: 20 seconds.)

2. "Now write your name again, just as you did under '1,' *but with your eyes closed.* You must place your pencil in position, so that when I give the signal you will be ready to begin. Remember to write your name *again and again* during the time between signals. *Don't open your eyes* until I give the signal to stop. Ready — Close eyes — Go."

(Time limit: 20 seconds.)

3. "Under '3' you are to write your name in your usual way, but while you are doing this you are to keep your eyes fixed on this pencil and you are to count aloud with me the number of times I tap the table with the pencil. Keep your eyes on the pencil and count aloud. Keep on writing until I stop tapping. Ready — Go."

Examiner taps on the table slightly faster than once per second. He also counts aloud vigorously.

(Time limit: 20 seconds.)

4. "Under '4' you are to write your name repeatedly from the signal to begin until the signal to stop. While you are writing I am going to read you a list of words that rime with 'fly,' such as 'die,' 'sigh,' and 'lie.' You are to keep track of the number of times I say the word 'fly.'

"When I give the signal to stop, record the number of times I read the word 'fly.' *Don't forget to keep on writing your name all the time.* Ready — Go."

List to be read by examiner:

Fly, die, sigh, sky, fly, fly, fly, my, fly, lie, die, by, fly, fly, high, fly, cry, fly, sigh, sigh, fly, nye, my, fly.

The examiner should time his reading so that 20 seconds will be required to go through the list. If he fails to complete the list, he should record the number of times "fly" was read. If he finishes before the end of the 20 seconds, he should reread part of the list, recording the correct number of times "fly" was pronounced.

(Time limit: 20 seconds.)

Test XI. Self-confidence

"Turn to Test XI. After each one of the 16 sentences you will find the words 'false' and 'true.' If you think what a sentence says is true, draw a line under 'true'; if it is false, draw a line under 'false.'

"For example, 'I read you a list of words early in the test. true false.'

"This is a true statement, and the word 'true' is underlined.

"If you are *absolutely sure* that you are right, draw two lines under 'true' or 'false.'

"Take all the time you need to mark the sentences. When you have marked *every one*, hold your pencil up to show that you have finished. *Don't skip any.*"

Test XII. Non-compliance

When every one has finished Test XI, say:

"Of the sentences you have just marked, *eight* are false, *eight* are true. You may correct your work in this way: Draw a circle around any 'true' or 'false' that you made a mistake in marking, and underline the other word instead. For example, sentence 2 reads, 'Two of the words in the list rimed.' If this was false, but you underlined the word 'true,' draw a circle about the word 'true' and underline 'false' instead.[1]

"You may make all the corrections you care to, so as to mark *eight* false and *eight* true, *but don't erase any marks.* Raise your pencil when you have finished."

The examiner should give time for all to make any changes they desire. Three minutes is probably sufficient.

Test XIII. Finality of Judgment

"Turn to Test XIII. When the signal is given you are to turn back to Test I and make any changes you care to in the way you marked your own character traits. If you want to make any changes, draw a circle around the word you marked first and underline the other word of the pair.[1] Do not check any traits *in addition* to those you checked in the first place. When you have finished, look at the blackboard and write in the space marked 'Number' on page 12 *the first number I write after you look up.*

"Now turn back to Test I and make what changes you wish. Ready — Begin."

At this point the examiner should note the time by his watch, and at the end of 3 seconds he should write the number 3 on the blackboard. At the end of each succeeding 3 seconds he should write the number of seconds which have elapsed, in a column which will appear thus:

3
6
9
12 etc., up to 120.

[1] With children below the 9th grade the illustration should be put on the blackboard and explained.

After reaching 114 the examiner quits writing and tells those who have not finished to write 114 in the blank. If desired, a little further time may then be allowed for the checking.

TENTATIVE SCORING OF GROUP-TEST

The directions for scoring are to be used in conjunction with the table on page 16. The norms were obtained from an approximately small number of adults and are only *tentative*. After more extensive application of the tests, material will be at hand for establishing norms for different ages.

Test I. Speed of Decision. Checking of traits. Scored on number of decisions made in time limit. See table, page 16.

Test II. Normal and Speeded Writing of Name. Not scored; given as practice for Test VI.

Test III. Retarded Writing of Name. Not scored; given as preliminary practice for Test VII.

Test IV. Memory Test. Not scored; given in preparation for Test XI.

Test V. Coördination of Impulses. Writing "United States of America" in a restricted space and at speeded time. Scored on number of letters omitted or over the line. See table, page 16.

NOTE. The method of scoring used is open to the objection that it fails to reckon with variations in normal speed and that it makes no distinction between those who fail to finish writing the phrase through lack of time and those who finish but run over the line.

It is possible to correct a particular record or to note the quality of reaction by the following procedure:

Calculate from Test VI the normal and speeded time for writing the phrase once. Using these values, score the reaction on the basis of the norms given for Test V, in the Manual of Directions for the Individual Tests.

Test VI. Speed of Movement and Freedom from Load. Speed of Movement is scored from VI. 1 on the number of letters written at normal speed within the time limit. See table, page 16.

To score for Freedom from Load, divide the number of letters written during the speeded trial (VI, 2) by the number written at normal speed (VI, 1). Score this ratio in accordance with the norms given in the scoring table, page 16.

Test VII. Motor Inhibition. Scored on third trial according to norms given in table. Each scroll is divided into 33 equal units, and the scoring is based on the number of units traced.

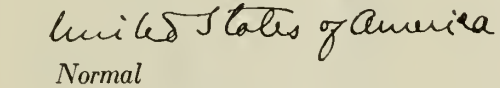
Test VIII. Flexibility. Score disguised hands (VIII, 1 and 2), first and second attempts each, 0, 1, or 2, according to amount of change. (See samples below.) If the phrase was not written under 2, score the best practice attempt.

Score Rapid Imitation of Model A (VIII. 3) according to quality and speed, as follows:

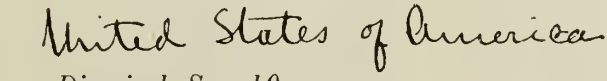
Rate the quality A, B, C, D, or E according to general effect (see page 12), E signifying complete reversion to the subject's own hand.

Count the letters written, and in the left-hand column of the schedule below find the group in which the speed of writing falls.

Find the score under the proper letter and opposite the proper speed group.



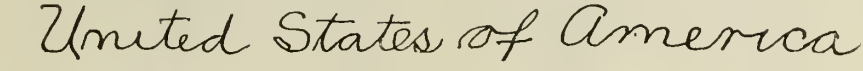
Normal



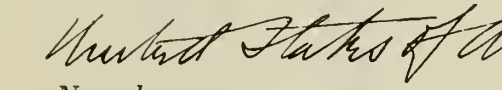
Disguised. Scored 0

Three examples of normal and disguised writing. Test VIII, 1 and 2

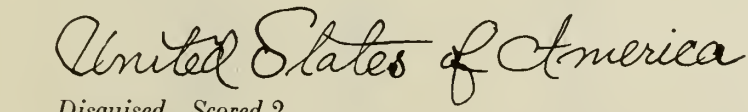
Normal



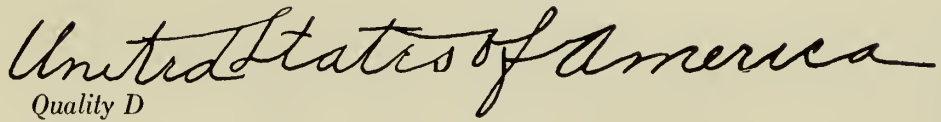
Disguised. Scored 1



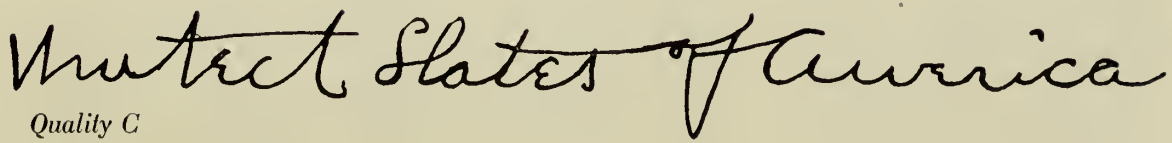
Normal



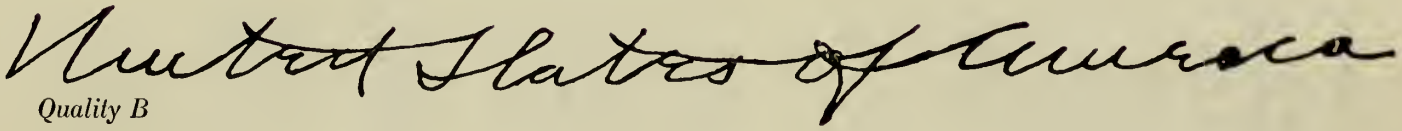
Disguised. Scored 2



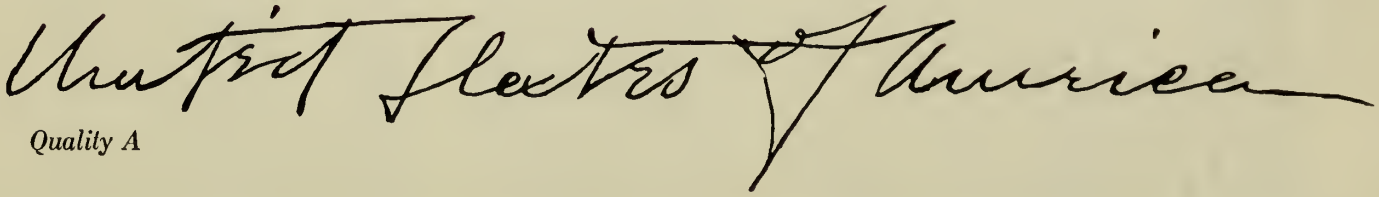
Quality D



Quality C



Quality B



Quality A

Four examples of rapid imitation of Model A. Test VIII. 3 (See page 16)

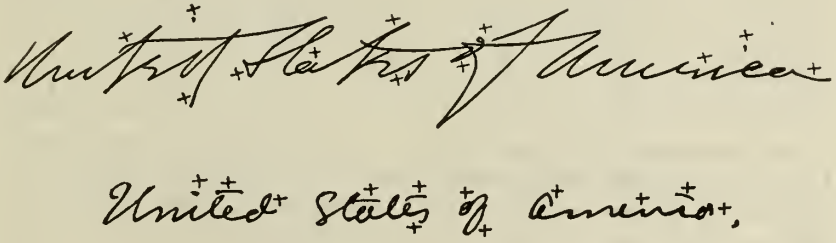
NUMBER OF LETTERS WRITTEN	A	B	C	D	E
147–42	6	6	4	2	0
41–21	6	4	3	1	0
20–10	4	3	2	0	0
Under 10	3	2	1	0	0

Add partial scores to find the total score.

Test VIII. 2. Volitional Perseveration. The score on this trait is determined by the amount of time spent in practice on the disguise. From the number the examinee records in the blank find the score according to the table, page 16.

Test IX. Interest in Detail. This test is scored on the success of the examinee in copying the writing and on the time he gives to the task as compared with his speed in Rapid Imitation of Model A (VIII. 3). The scoring procedure is as follows:

Rate imitations Model A(IX, 1) and imitations Model B (IX, 2) jointly, A, B, C, D, E, or F, according to accuracy in details. Note about fifteen details in the two imitations, — such, for example, as proper placing of i-dot, form of t-bar, etc., — and penalize one letter-grade for each three bad failures. The crosses on the accompanying illustration show the sort of details that should be noted in scoring. Quality A means no penalizing.



Find the difference in the number of letters written for rapid imitation (VIII, 3) and for slow imitation (IX, 1) of Model A, and in the left-hand column of the schedule below find the group in which this number falls.

Under the proper letter and opposite the proper number, find the score.

DIFFERENCE IN NUMBER OF LETTERS	A	B	C	D	E	F
36 & over	10	9	8	7	6	5
21–35	9	8	7	6	5	4
12–20	8	7	6	5	4	3
6–11 Note	7	6	5	4	3	2
2–5 Note	6	5	4	3	2	1
1 or negative	5	4	3	2	1	0

NOTE. A slight difference in number of letters written in VIII and IX may be due to preoccupation with detail. If the quality of copy is A or B for imitations in VIII and IX and less than 22 letters are written in VIII, score 10 for Detail.

Test X. Motor Impulsion. By means of the accompanying schedule, score writing according to size and amount written as compared with normal size and amount written at normal rate. Score 2, 3, and 4 separately and then obtain the mean score.

RATIO OF LETTERS	GREAT MAGNIFICATION (ABOUT 50%)	MODERATE MAGNIFICATION (ABOUT 25%)	SLIGHT MAGNIFICATION	NORMAL	SLIGHT DECREASE IN SIZE	GREAT DECREASE IN SIZE
1.10 or over	10	10	8	6	4	2
.90–1.09	9	9	7	5	3	1
.75– .89	8	7	6	4	2	1
.55– .74	6	5	4	3	2	1
.33– .54	4	3	2	2	1	1
.00– .32	2	1	1	1	1	1

To score each trial, note the size of the writing under distraction as compared with normal size. Then find the ratio of the number of letters written under distraction to the number of letters written at normal rate, by dividing the former by the latter, and find the proper score in the schedule. Take the mean of these for the final score.

Test XI. Self-confidence. Scored on number of items doubly underlined. See table, page 16.

Test XII. Non-compliance. Scored on number of changes made after the suggestion has been given by examiner.

Find the ratio between the number of changes actually made

(numerator) and the number of changes necessary for complete acquiescence to the suggestion that "Eight of the statements are false; eight, true" (denominator).

The latter number is found by subtracting from 8 the number of statements marked "false" before the suggestion is given, and shows to what extent memory was at fault.

Add 1 to the numerator of the fraction for every change in which the original decision was doubly underscored and also add 1 for any change in marking any of the following statements: 3, 4, 5, 7, 9, 12, 13. Tabulation of returns has shown that these decisions are rarely revised. Apparently they afford little chance for a rationalization process that justifies a change.

EXAMPLE. Suppose a subject before the suggestion is given marks 12 of the statements "true" and 4 "false." The suggestion that 8 are "false" brings 3 changes out of a possible 4. Two of the items changed were doubly underscored in the original marking; the ratio, then, is 5/4 or 1.25, and reference to the norms (see table) indicates that the score would be 4.

Test XIII. Finality of Judgment. Scored on time spent in rechecking Test I. See table, page 16.

THE WILL-PROFILE

The will-profile shows in graphic form the scores made in the various tests. To plot the graph, indicate on the record blank the score for each trait by placing a dot on the line labeled with the name of the trait. Then connect the dots with a line. For sample will-profiles and a discussion of them, the publications already referred to must be consulted.

SCORING TABLE

SCORE	TEST I	TEST V	TEST VI, 1 & 2	TEST VI, 1	TEST VII	TEST VIII, 2	TEST XI	TEST XII	TEST XIII[1]	SCORE
10	30	0 letters	under 1.09	56 & over	0–3	315–360	15–16	0	3–24	10
9	24–29	1–2 letters	1.10–1.15	54–55	4–5	245–310	13–14	.11–.35	27–30	9
8	21–23	3 letters	1.16–1.17	49–53	6–7	195–240	12	.36–.59	33–36	8
7	18–20	4 letters	1.18–1.21	48	8–9	160–190	11	.60–.79	39–42	7
6	17	5 letters	1.22–1.26	44–47	10–12	135–155	10	.80–1.00	45–51	6
5	15–16	6 letters	1.27–1.30	43	13–15	120–130	8–9	1.10–1.29	54–60	5
4	14	7 letters	1.31–1.32	42	16–21	100–115	6–7	1.30–1.45	63–69	4
3	12–13	8–9 letters	1.33–1.39	38–41	22–35	85–95	4–5	1.46–1.69	72–87	3
2	10–11	9.5–12	1.40–1.50	35–37	36–59	65–80	1–3	1.70–2.0	90–171	2
1	1–9	Over 12	Over 1.50	0–34	Over 59	5–60	0	Over 2	120	1
Item on Profile	Speed of Decision D	Coördination of Impulses K	Freedom from Load B	Speed of Movement A	Motor Inhibition I	Volitional Perseveration L	Self-confidence F	Non-compliance G	Finality of Judgment H	Item on Profile

[1] Cut the score one for every change in decision made during revision.

PRESSEY X-O TESTS

DIRECTIONS: On each page of this folder there is a test. Work these tests in order, finishing each test before you go on to the next. Do not hurry; but work as rapidly as you can; your score will depend partly upon the quickness with which you work. Begin with Test I below.

TEST I t.....d.....

Read over the twenty-five lists of words on the page below and cross out every word whose meaning is unpleasant to you—every word which you do not like. You may cross out as many or as few words as you wish; but be sure to cross out everything that is unpleasant.

1. disgust fear sex suspicion aunt.
2. roar divorce dislike sidewalk wiggle.
3. naked snicker wonder spit fight.
4. failure home rotting snake hug.
5. prize gutter thunder breast insult
6. worm tremble street-walker rival city.
7. cruel shirt favorite laughter crawl.
8. undress slight journey dirty insanity.
9. nervous gift sewer dizzy pervert.
10. white drunk choke flirt unfair.
11. stink influence skin worry house.
12. execute stockings loss kind filthy.
13. suck meanness eat ugly black.
14. loneliness road sneeze fever illegitimate.
15. river vomit electricity immoral whisper.
16. smell blood skirt cheat horse.
17. slash tough giggle bargain flesh.
18. pregnant voices quiet leg kill.
19. sin smile swamp spider tickle.
20. distance slippery cannibal assault persecute.
21. butcher poison abortion contempt visit.
22. detective engagement queer door pus.
23. pox homely fried sticky falling.
24. disgrace fence bladder dream baby.
25. boat yellow crazy indecent shame.

FURTHER DIRECTIONS: Read through the lists again. Do not change any of the marks you have already made. In addition to these, draw a line around the ONE word in each list that is most unpleasant to you. If you are not sure, guess. If there is no unpleasant word in a list, find the least pleasant. Work rapidly; but be sure that you have a line around one, AND ONLY ONE, word in EVERY list.

When you have finished this test, turn over the page to Test II.

TEST II t.....d.....

DIRECTIONS: In this test there are twenty-five words in large letters, each followed by a list of five words in small letters. Go through these lists, and cross out, in each list, all the words that are connected in your mind with the word in large letters at the beginning of the list. You may cross out as many or as few words as you wish. But be sure to cross out every word, in each list, that is connected or associated in any way, in your mind, with the word in large letters at the beginning of that list.

1.	BLOSSOM	flame flower paralyzed red sew.
2.	LAMP	poor headache match dogs light.
3.	BATH	naked choke tree alone danger.
4.	KING	father baseball queen rights razor.
5.	SLEEP	grade ache fright tongue worry.
6.	RIVER	dark fear hynotize dead necktie.
7.	HAND	slimy followed strong sky kill
8.	WINDOW	high fall wheat queer judge.
9.	BOY	marriage cloud brave disgust sweet.
10.	RELIGION	wood truth crime longing sickness.
11.	DREAM	floating heart beautiful manhood bicycle.
12.	DOCTOR	scream baby head sale immoral.
13.	FOOT	girl contempt cider undress escape.
14.	SPIDER	chills cook female drunk clammy.
15.	CHEESE	floor buried whip hang worms.
16.	GIRL	health figure wrong soft climb.
17.	JUSTICE	terror enemy unfair ice plot.
18.	WHISKEY	crawl jealousy snow wife horrors.
19.	BITTER	family key suspect old hope.
20.	WISH	broom tired never disappointment die.
21.	ANGER	lover home trick laugh cloth.
22.	HUNGER	funeral poison work stump shoot
23.	SICKNESS	children memory saw sin worry.
24.	LIVING	agony country bed drug bare.
25.	DEATH	five water self welcome hopeless.

FURTHER DIRECTIONS: Go through the lists again. Do not change any of the marks you have already made. In addition to these, draw a line around the ONE word in each list that is most closely connected in your mind with the word in large letters at the beginning of the list. If no word in the list has any connection in your mind with the first word, or if you are not sure which is most closely connected, guess. Work rapidly; but be sure you have a line around ONE, AND ONLY ONE, word in EVERY list.

When you have finished this test, go on to Test III on the opposite page.

TEST III t.....d.....

DIRECTIONS: Read through the twenty-five lists below and cross out everything that you think is wrong—that a person is to be blamed for. Cross out as many or as few words as you wish; but be sure to cross out everything that you think is wrong.

1. begging swearing smoking flirting spitting.
2. fear hate anger jealousy suspicion.
3. dullness weakness ignorance innocence meekness.
4. careless fussy reckless silly childish.
5. poor extravagant sporty shrewd bad-mannered.
6. clumsy slang blues dancing snob.
7. thief prostitute grafter thug gambler.
8. war lynching revolution king socialism.
9. dirty idle conceited tough smutty.
10. worry thoughtless day-dreaming tired slow.
11. divorce bankruptcy gang overwork politics.
12. dishonest illegitimate failure drunkard coward.
13. sad bashful stupid easy queer.
14. lazy mean disgrace immodest fighting.
15. prize-fight drugs indecent loafing cheating.
16. debt theatre shabby proud chewing.
17. cheap smelly stingy meddling pick-up.
18. betting squealer street-walker cruel graft.
19. mistress scab dope-fiend swindler bully.
20. strike lock-out union trust detective.
21. broker lawyer millionaire judge priest.
22. church-going fasting cards quitter over-eating.
23. stubborn speculating gossip pity greedy.
24. boasting nagging persecute money overdressed.
25. teasing sneering tricky brutal insane.

FURTHER DIRECTIONS: Go through the lists again. Do not change any of the marks you have already made. In addition to these, draw a line around the ONE thing in each list that you think is worst. If you are not sure, guess. If there is nothing in the list which you think is wrong, draw a line around the thing which you consider least good. Work rapidly; but be sure you have a line around one, AND ONLY ONE, word in EVERY list.

When you have finished this test, turn over the page to Test IV.

TEST IV t.....d.....

DIRECTIONS: Read through the twenty-five lists below and cross out everything about which you have ever worried or felt nervous, or which you have ever dreaded. Cross out as many or as few words as you like. But be sure you cross out everything about which you have ever worried.

1. injustice noise self-consciousness discouragement germs.
2. clothes conscience heart-failure poison sleep.
3. sickness enemies money blushing failure.
4. falling queerness religion dizziness boss.
5. sin operation conspiracy lightning marriage.
6. neighbors accidents impulses suicide disfigurement.
7. women forgiveness cancer insult tiredness.
8. fainting influences nightmares emotions God.
9. tunnels ugliness blues pain sneer.
10. ruin deafness unfairness work stammering.
11. persecution drugs parties depression headache.
12. day-dreaming loneliness arteries visions dogs.
13. food suspicions temper manners guilt.
14. business bashfulness soul weakness machines.
15. childhood syphilis rivals windstorms men.
16. voices exhaustion sex helplessness disease.
17. longings forgetfulness smoking teasing darkness.
18. paralysis employer hysterics moodiness worry.
19. gun immodesty crying stomach fault-finding.
20. children medicine hypnotism crowds dances.
21. whisperings fire inferior unbelief tuberculosis.
22. giggling grave nervousness spirits twitching.
23. suffocating slight habits jokes nervous-breakdown.
24. cats engagement confusion epilepsy teacher.
25. death insanity inventions wreck awkwardness.

FURTHER DIRECTIONS: Go through the lists again. Do not change any of the marks you have already made. In addition to these, draw a line around the ONE thing in each list about which you have worried the most. If there are lists in which there is nothing about which you have worried, draw a line around the thing you would be most likely to worry about. If you are not sure, guess. Work rapidly; but be sure you have a line around one, AND ONLY ONE, word in EVERY list.

As soon as you have finished the last test write your name on the line below:

NAME .....

Then hold up your hand so that the examiner will know that you have finished.

time.....total aff.....id.....

No. 24500—Pressey's Test C. H. Stoelting Co., Chicago, Ill., U. S. A

APPENDIX F. ix.

THE EXPER 'S RECORD

An Inventory and S *: Factors in Experience Contributing to the Formation of Personality*

Single copies of the Record, 25c
In packages of 10 or more, per copy, 15c
The Experience Variables, paper-bound monograph, 75c

Published by DR. J. O. CHASSELL,
University of Rochester School of Medicine,
Rochester, N. Y.

Explanation

This is neither a test nor a questionnaire, altho it may be used as the latter. It is primarily a scheme for tabulating personal-history data in a somewhat quantitative and objective fashion. It was developed by pooling the reports of more than 100 students of their main adjustment problems in life, and of the experiences related thereto. Almost every statement represents the actual experience of one or more persons. In one aspect, therefore, it may be considered as an *inventory* of the main life problems faced by later-adolescents, the types of response by which they try to meet these, and some of the genetic factors in these responses. Its inclusiveness is predicated only for the cultural group from a sampling of which it was developed—i. e., the American present generation collegiate group.

The twelve main sections into which the Record is divided were arrived at empirically, and seem to represent the main situations (in our society) in which the growing youth finds it necessary to make adjustments and develop the more stable attitudes which constitute the framework of his character. The twelve are: Mother Relationship; Father Relationship; Relationship with Brothers and Sisters; Home Life; Religion and Standards; Sex Development; Love Affairs; Physical Development; Intellectual Development; Vocational Adjustment; Social—Adjustment in Comrade Group, Status in Community, Public Recognition; General Emotional Adjustment, Happiness, etc. The material in each section is arranged in four parallel columns, approximately as follows:

Column I	Column II	Column III	Column IV
Environmental situation; general background.	Environmental factors bearing more directly upon the individual subject.	Subject's Responses; his traits, interests, tendencies.	Problems of Adjustment and main "Difficult Situations" encountered by later-adolescents.

The expectation is that the first three columns will explain, or throw much light upon, the responses in the last column. Responses in column III should also be illuminated by columns I and II.

The varying statements under each heading have been arranged so far as seemed legitimate into a series of steps, ranging, when concrete statements were available, from *a* to *d*. It is intended that the end steps, *a* and *d*, should in each case describe the extreme positions found in this cultural group. So far as this condition is fulfilled, the Record may be utilized as a *scale* for the tabulation of individual case histories so that they may be made comparable and quantitative. It should be possible to locate any individual's status with respect to any particular Variable at some step between the existing extremes. This should enable us to make a fairly definite measure of the extent of presence of any trait or genetic factor, whether it be maternal solicitude or response to corporal punishment. Thus a large set of personal histories, collected by the most diverse means, might be tabulated in such a way as to be comparable and to be subject to routine statistical treatment. Provision is made for different entries for three periods of life: Childhood, Early Teens, and Recent or Now.

The Experience Variables Record is printed separately for use: (1) as a scale on which to tabulate life history material gained by various means—personal conference, written records, reports from parents and friends, etc., (2) as a questionnaire, or for use in making up shorter questionnaires, (3) as an adjunct to personal counseling, particularly with college students, (4) as a syllabus for group discussions in mental hygiene or socio-psychology. It is hoped that the Record, altho obviously incomplete at many points, may embody a sound principle and be of considerable use, as an instrument of research and as an aid in practice, not only in the field of "Mental Hygiene" *per se*, but also in social or religious "character education," and in the more theoretical concerns of general socio-psychology.

An explanation of the document and its uses will be found in further detail in section A of the author's monograph, "The Experience Variables."

Instructions

In tabulating an individual's story—whether your own or another's—put a check in each column opposite the statement that comes nearest describing the situation. In addition, if the printed alternatives are inadequate—as they often will be—short further explanations may be written on a separate sheet, or in the nearest vacant space. The aim should be to make the finished product, as nearly as may be, an accurate and complete transcript of the subject's story. These written additions, if sent to the author, should be of considerable value in a possible future revision.

The three columns headed "Childhood, Early Teens, Recent or Now" should be understood to mean, "During the Subject's Childhood, During Subject's Early Teens," etc.

The starred items in the Record are the subject of more detailed study in the monograph. If a "shorter form" of the Record is desired, these starred items, alone, may be answered.

Persons who have filled out the scale for themselves as a sort of "self-analysis" say that it has been of no little value, in helping them see illuminating connections in their own experience, and in giving a background and perspective for understanding others. When utilizing it in this fashion, the best procedure is, undoubtedly, to spread the work over several days, and to discuss the problems raised with a capable counselor or trusted friend.

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Rochester, N. Y.

Second printing, May 1929.

MOTHER RELATIONSHIP	Child-hood	Early Teens	Recent or Now
*Extent of Mother's Interest in Outside Affairs			
A prominent woman, organizing work in several states, e. g. 1. a			
Active in clubs and church work, etc. b			
Some outside interests, but primarily concerned in home and home affairs. c			
Exclusively a housewife and homebody sort of person. d			
Extent to Which Her Personal Ambitions and Interests Are Directly Satisfied			
Able to carry on her chosen "career." 2. a			
b			
c			
Previous hopes and intentions frustrated, e. g., by household cares. "Gave up her own profession to devote herself completely to him." d			
Her frustrated cravings were:			
*Her Emotional Stability			
Very stable, balanced, happy. Sense of humor. Not easily annoyed. 3. a			
Loses patience occasionally; not seriously. b			
Worries considerably. Tears. Sometimes a pained martyr-like expression. Loses temper—stern, angry. c			
Subject to violent temper outbursts. Sulky. d			
Age of Mother at Birth of Subject			
Under 20, 21–25, 26–30, 31–35, 36–40, over 40. 4.			
(Underline).			

MOTHER RELATIONSHIP	Child-hood	Early Teens	Recent or Now
*Her Interest and Personal Concern in Subject			
Wrapped up in him, his triumphs and failures, governs her movements by his. 5. a			
Rather solicitous over his welfare. b			
Busy with church work, large family, etc., and did not concern herself particularly with him. c			
Indifferent—glad to leave him with nurses or to send him away to school. d			
*Her Urgency toward His Carrying out "Her Way"—Her Tendency to Domineer			
Demands that her own plans and ideas be carried out. Strict obedience—"Mother knows best." 6. a			
Likely to express grief, disappointment, dissatisfaction at deviations from her wishes. b			
Never insists on her way alone—makes suggestions. c			
Cooperates in his decisions even when not fully understanding or agreeing with them. Encourages him to make his own decisions. d			
*Mother's Severity in Dealing with Subject			
Whips him, goes into rage at him. Nags constantly, shames, humiliates him, etc. 7. a			
Occasional spankings. b			
Scolds, but quick to make amends. c			
Never scolds or nags—never heard a harsh word from her. Talks things over with him. d			
Her Tendency to Spoil Him			
Over-indulgent, gives in to avoid conflict. He can get whatever he wants. "Babies" him. 8. a			
b			
c			
Stern and unbending toward him. d			
*Her Tendency to Exhibit Physical Affection toward Him			
Very demonstrative, marked exhibitions of affection. 9. a			
Steady general affection—consistent but not marked. b			
Physical demonstrations on rare occasions—eve of departure. c			
Very undemonstrative—subject doesn't recall ever sitting on her lap. d			
*Her Attitude of Intimacy with Him			
Very intimate, confiding, stimulating intimacy; never let anything get in way of close relationship with him. 10. a			
Sought confidence on almost everything (except sex, e. g.) b			
Did not ask or expect him to confide in her. c			
Built a shell around herself that could not be invaded—intimacy impossible. d			
Physical Factors Bearing on Her Attitude toward Him: 11.			
(Note especially when menopause sets in, and its effect.)			

MOTHER RELATIONSHIP	Childhood	Early Teens	Recent or Now
***Subject's Tendency to Sacrifice His Own Wishes for Hers**			
Gives up strong interest in music, e. g., to work for the school honors his mother craves—tries to realize her ambitions, to do what pleases her. 12. a			
Makes some adjustments to please her, feels selfish or uncomfortable in following own plans, tho sure they are best. b			
Follows own inclinations, makes own plans regardless of her. c			
Does the opposite of what she wishes, strikes off in opposite direction. Antagonism to doing what mother wants. d			
***His Idealization of Her**			
Worships and adores her—"perfect." 13. a			
Understands her—tolerant and sympathetic of her faults. Able to look at her as a person having good and bad traits. b			
Finds it hard to be sympathetic toward her. Distressed or annoyed by her. c			
Feels scorn, disdain, bitterness toward her. d			
His Attitude toward Physical Affection from Her			
Seeks it, takes great pleasure in it. 14. a			
Usually enjoys it. b			
Somewhat embarrassed or annoyed by it. c			
Scorns it. d			
***His Intimacy with Her**			
Tells her everything. 15. a			
Tells her most everything, with exceptions, e. g., sex worries. b			
Not given to confidences. Embarrassment and difficulty in sharing with her. c			
Tells her as little as possible, lying rather than confiding. d			
Adjustment to Step-Mother or other Mother Substitute: 16.			
His Response to Difficult Situation: Mother Emotionally Unstable; Domineering; Using Emotionally Severe Methods of Dealing with Him—in Short, Mother Clearly a Hard Person to Get Along with.			
Reasonably adjustive—satisfactory solution, such as: insight into causes of her condition; able to discriminate between her agreeable and disagreeable traits; able to sympathize with her; does not get angry with her even under great provocation; able to carry out the vocational and other plans he deems wisest. 17. a			
Sometimes resents her misunderstandings, etc., but recovers when he realizes the reasons for them. Avoids friction whenever possible. Does not hesitate to lie to her to avoid unnecessary and purposeless upsets. b			
Somewhat non-adjustive. c			
Distinctly unsatisfactory, non-adjustive response: quarreling, getting horribly mad at her; sick with worry when anticipating an attack from her; bitter at her for his bringing up; tormented by conscience over the situation yet unable to bring self to try to do anything about it; cannot free himself from her influence—vocational and other decisions colored by tendency to be "contrary" or to "give in," reacting to her rather than to the situation. d			
Response to the Difficult Situation: a Mother Who Tends to Spoil Him, to Center Attention on Him, to Be Wrapped up in Him, His Triumphs and Failures: 18.			
Response to Later Adolescent Task of Freeing Self from Childhood Relation to Mother, Taking a Reasonably Objective Adult Attitude toward Her:			
Indications of Objectivity: companionable, mental and social equals; understands her, tolerant and sympathetic, not irritated by differences; not unduly idealizing and adoring her—able to look at her as a *person* with a genetic history accounting for good and bad traits; receives advice and suggestions from her gladly, but does not feel compelled to agree with them; some sort of satisfactory living arrangement made—probably not living with her. 19. a b c			
Evident Lack of Objectivity: Feels scorn, disdain, bitterness *or* worships and adores her; regards her uncritically as an authority on life; cannot bear the thought of her (inevitable) death. d			
Response to Difficult Situation, Death of Mother (Subject's age at her death ....).			
Adjustive. 20. a			
Stronger faith in God and immortality. b			
Strong persisting grief; flood of tears at any reminder of her. c			
Non-adjustive: unable to accept the fact; nervous breakdown follows the event; plagued by memories of incidents showing lack of care for mother. d			

FATHER RELATIONSHIP	Child-hood	Early Teens	Recent or Now
Father's Ambitiousness			
The ambitious sort—tense, more interested in succeeding than in making friends. 1. a			
b			
More interested in people than in promotions. c			
Clearly not ambitious. d			
***Father's Social Success and Popularity**			
Extremely popular or highly revered, a "big man." 2. a			
Well liked, excellent reputation; not outstanding. b			
Regarded as rather crude; as crank; not amounting to much. c			
Looked down upon as drunkard, drug addict, ne'er-do-well. d			
Extent to Which His Personal Ambitions and Interests Are Satisfied. 3. a			
Has friends, is successful and trusted. b			
c			
Trying various occupations, failing. A dreamer, wanting success but lacking something. Feels frustrated and in wrong occupation. Unhappy and discouraged. d			
***Father's Emotional Stability**			
Stable, well-adjusted, happy. 4. a			
Sometimes upset, irritated, "out of sorts"—not usually. b			
Likely to "fly off the handle," to be angry and unreasonable. Feelings easily hurt. c			
Moody, depressed. Terrible temper spells. Unhappy, discouraged, badly adjusted. d			
Opportunity for Contact with Offspring			
At home most of the time. 5. a			
b			
c			
Away most of the time. Busy with work. Rarely sees him. d			
Father's Age at Birth of Subject			
Under 20, 21–25, 26–30, 31–35, 36–40, over 40. 6. (Underline.)			

FATHER RELATIONSHIP	Child-hood	Early Teens	Recent or Now
***Father's Urgency That Subject Follow His Plans—His Tendency to Domineer**			
Very autocratic, forced obedience, insisted that his plans be carried out. 7. a			
Tactful, but firm—insists on obedience, but is reasonable. b			
Few commands, many suggestions, much advice. c			
Gives advice when asked. Encourages subject to decide things, accepts the decisions. d			
Emotional Severity of His Methods of Dealing with Subject			
Brutal scenes—children afraid of being killed. Thrashings. 8. a			
Pounces on subject for disturbing him. Teases subject continually. b			
c			
Very wise and gentle. d			
***Physical Affection Displayed by Father toward Subject**			
Very demonstrative, many endearments. 9. a			
Not very demonstrative, but natural and not unfeeling. b			
Embarrassed and tense in demonstrations of affection. c			
Reserved, very undemonstrative, e. g., kissed seldom if ever. d			
***Father's Interest and Personal Concern in Subject**			
Very fond of him. Spent his hours at home mostly with him; much attention. 10. a			
Considerable interest and attention, so far as he could spare the time from other things. b			
Doesn't bother much with him; leaves bringing up to mother. c			
Ignores him. Would have him sent away to school to get him out of the way, etc. d			
Physical Factors Bearing on His Behavior toward Subject: 11.			

FATHER RELATIONSHIP	Child-hood	Early Teens	Recent or Now
Devotion to Father—Sacrifice of Own interests because of Attachment to Him			
Loved him so that she took for-granted that she would spend her life supporting and looking after him. 12. a			
Mothers him, cares for him, tries to correct his bad habits. b			
Supporting and looking after him, but resenting it. c			
Would like to give him financial aid, but does not give up own plans to do so. No thought of not living own life independently of him. d			
***Subject's Fear of Father**			
"Scared stiff," didn't dare do anything for fear father might jump on him. 13. a			
Rather afraid—obeys uniformly. b			
Able to differ from him and to maintain own point of view, but hesitates to do so. c			
No fear—could deliberately go against his will when desirable. d			
***Subject's Idealization of Father**			
Worships him, measures men by him. "A perfectly wonderful man." 14. a			
Understands him—tolerant and sympathetic of his faults. Able to look at him as a person having good and bad traits. b			
Distressed, annoyed, or ashamed of him. Finds it hard to be sympathetic or tolerant of him. c			
Feels scorn, disdain, bitterness toward him. d			
***Subject's Intimacy with Father**			
Intimate discussions, could always confide in him. 15. a			
Talks most things over, with some exceptions. b			
Comparatively little intimacy. c			
Discusses nothing with him—keeps to self. d			
Subject's Companionship with Father			
Romped, played games, was carried on his shoulder. Hikes, enjoyable trips. 16. a			
Like to be together, but don't have many interests in common. b			
Father disliked children's play, did not take part. c			
Little companionship. Avoided him as much as possible. d			
Response to Step-father or other Father Substitute: 17.			

FATHER RELATIONSHIP	Child-hood	Early Teens	Recent or Now
Response to Difficult Situation—Father Emotionally Unstable, Severe in His Methods of Dealing with Subject, Very Domineering			
Satisfactory adjustive response:			
Understands his difficulties, sympathizes. 18. a b c			
Non-adjustive, handicapping response:			
Continual controversy, hot words.			
Great fear of him.			
Gets along only by repressing self continually. d			
Response to Later Adolescent Task of Freeing Self from Childhood Relation to Father, Taking a Reasonably Objective Adult Attitude toward Him			
Indications of objectivity:			
Companionable, on terms of equality.			
Understands him—able to see him as a *person* having a genetic history accounting for good and bad traits.			
Receives advice, but not compelled by it.			
Satisfactory living arrangement. 19. a b c			
Evident lack of Objectivity:			
Marked idealization or marked scorn and bitterness.			
Marked devotion.			
Bursts into tears at mention of his (inevitable) death, cannot entertain it as a possibility. d			

RELATIONSHIP WITH BROTHERS AND SISTERS	No. I, Older by — Years Same Opposite Sex as Subject			No. II, Older Younger by — Year Same Opposite Sex			No. III, Younger by — Years Same Opposite Sex		
	Child-hood	Early Teens	Recent or Now	Child-hood	Early Teens	Recent or Now	Child-hood	Early Teens	Recent or Now
Relationship with Each of Three Most Important Siblings (Brothers or Sisters)									
1. *Comparison of talents*									
Sib seemingly more talented than subject. 1. a									
b									
Sib seemingly less talented. c									
Sib obviously handicapped. d									
2. *Comparison of popularity in family*									
2. a									
Sib favored more. b									
Subject favored more. c									
d									
3. *Amount of companionship, intimacy, affection*									
Very companionable, intimate. Great pals, like to be together. 3. a									
Sometimes exchange confidences. b									
Tend to be distant. c									
Hostile, or strangers to each other. d									
4. *Amount of competition, jealousy*									
Always trying to surpass him. 4. a									
Envious of sib's talents, clothes, beaux, etc. b									
c									
None. d									
5. *Idealization of this sib*									
Looks upon him as example—adopts his likes and dislikes. Tries to identify self with him, to wear his clothes, imitate his appearance, etc. Hero. 5. a									
b									
c									
Despises him, irritated by his slack traits. etc. d									

RELATIONSHIP WITH BROTHERS AND SISTERS		Childhood	Early Teens	Recent or Now
*Tendency of Parents to Favor Other Children above Subject				
Subject the unfavored or unpopular one—compared unfavorably with the other children.	6. a			
Subject about on a par with the others.	b			
Comparisons seldom made, little partiality shown.	c			
Subject favored above the others. Held up as example. Indulged more than the others.	d			
*Attitude Taken by Older Brothers and Sisters toward Subject				
Kindly, companionable.	7. a			
Tolerated subject, gave him some attention.	b			
Seemed annoyed, bored by him.	c			
Teased, bullied, domineered him.	d			
*Amount of Friction among the Children				
Violent scenes, even physical encounters.	8. a			
Quarreled, got along badly.	b			
Some conflict—not serious.	c			
No conflict.	d			
Preparation of Subject for Birth of Younger Brother or Sister				
Well-prepared, looking forward with eager expectations.	9. a			
	b			
Event shrouded in mystery (stork or black-bag story).	c			
Great surprise and shock.	d			
Response to Problem of Finding Status among the Children, Especially in the Difficult Situation When Some of the Others Seem More Esteemed or Favored:				
Adjustive: Trying to do something distinctive, proud of successes.	10. a			
	b			
Non-adjustive:				
Strong protest against trying to be like these sibs in any respect—vocation, musical skills, etc. Simply could not take up with the same things.	c			
"They were wonderful, I was nothing. I could do nothing. I was utterly miserable many times." Envious, quarreling, or sulking.	d			
Success in Later-adolescent Problem of Taking Adult Attitude toward Older Brother or Sister Who Tended to Be Somewhat Parental in Attitude:				
Companionable, on equal terms.	11. a			
	b			
	c			
Treats sib as parent and authority.				
Continued childish sort of attitude—cries and fusses at sib's criticisms; cannot maintain own standards.				
Violent controversy.	d			

HOME LIFE	Child-hood	Early Teens	Recent or Now
***Amount of Overt Conflict between the Two Parents**			
Terrible scenes, quarrels; tremendous emotional experiences. 1. a			
Constant friction, occasional scenes. b			
Some squabbles, not severe. c			
Harmony and peace. d			
Parents Separated 2.			
Divorced....			
Threatened separation....			
Subject's age at the time....			
Resulting situation:			
Amount of Group Family Life			
Family played together, went on picnics, worked in garden together. 3. a			
b			
c			
Home "just a place to board." d			

HOME LIFE	Child-hood	Early Teens	Recent or Now
***Amount of Obedience Demanded of Subject by Parents**			
Absolute obedience demanded. 4. a			
Had to obey as a general rule. b			
Certain definite laws, but otherwise free choice. c			
Left to decide things for self mostly. d			
Extent to Which Subject's Home Life Is Filled with Punishment and Disciplinary Measures:			
Whipt, humiliated rather continuously. 5. a			
Scolded, spanked occasionally. b			
c			
Never "punished." Things were talked over. Parents tried to show why things should or should not be done. d			
***Amount of Freedom and Latitude Allowed**			
Scarcely supervised at all—chased all over the neighborhood. 6. a			
Parents kept track of his whereabouts, but did not interfere much. b			
Had to ask permission as a rule. c			
Very strictly supervised—always under someone's eye. His day was planned out for him. d			
Cooperation from Parents in Bringing Friends into Home			
Welcomed them all—home was gathering place for the crowd. 7. a			
Parents rather particular about friends; but he could always have them in. b			
Objected to noise and parties and friends; uneasy about having them. c			
Parental scenes were likely to ensue if friends were brot in. d			
Financial Relation with Home			
Dependent. 8. a			
Semi-dependent, earning part of own expenses. b			
Giving some financial aid. c			
Supporting parents. d			
Conflict over money matters:			
Amount of Responsibility in Home (Voluntary or Assigned?)			
Great deal of responsibility—financial support, housekeeper, carrying family problems on shoulders. 9. a			
Chores, routine duties. b			
c			
No responsibilities whatever. d			

HOME LIFE	Child-hood	Early Teens	Recent or Now
Subject's Emotional Disturbance at Parental Conflict			
Terribly upset. Took part in fierce verbal battles, or did not take part, but withdrew into self and grieved. 10. a b			
Glad to get away. c			
Stood aside and looked on in detached way. d			
Amount of Obedience Rendered			
Obeyed implicitly, scrupulously. 11. a			
Approximate obedience. b			
Disobeys, concealing facts, bluffing; or rebels verbally, but obeys. c			
Open disobedience. d			
Amenability to Disciplinary Measures			
Usually recognized that the punishment was merited—took it. Amenable, quick to "come round." 12. a			
Resentment, but made up with affection. b			
Wept in private. Would say, "I wish I were dead." Sulky for short period, soon forgot it. c			
Continued resentment, surly, stubborn, sulky. So resistant that father gave in after terrible whipping. d			
***Subject's Response to Parental Disciplinary Measures**			
Openly defiant; threatened to run away, or ran away. 13. a			
Inwardly resentful, sometimes openly defiant. b			
Docile to avoid trouble. c			
Docile, no feeling of rebellion. d			
***Subject's Pleasure in the Family Life at Home**			
More interested in home than in gang or friends. Very happy times together as family. 14. a			
Enjoys home life, but has similar enjoyment in other groups. b			
Prefers outside companionship to family life. c			
Highly aggravated by enforced participation in family affairs—stays away as much as possible. d			
Interest in Taking Responsibility in Home			
Enjoys it, proud of home accomplishments. 15. a			
Takes as matter of course. Glad to do what is necessary. b			
Resentment when it interferes with own plans. c			
Hates it. d			
Behavior upon First Going away from Home—to School, Camp, on Visit			
Enjoyed it all. 16. a b c			
Sick with longing for home, or went back home. d			
Age at Which Subject Left Home on a Rather Permanent Basis 17.			
Boarding school, high school, college, subsequent. (Underline)			

HOME LIFE
Response to Difficult Situation: Home Attempts to Wield Excessive Control in Later-adolescence, Unwilling to Treat Him as a Maturing Adult
Adjustive: (Kindly but firm detaching). 18. a b c
Non-adjustive: Bitter. Abortive flurries—tries to be independent but cannot. Fights with family. Becomes a radical, shocks them, etc. d
Response to Difficult Situation: Circumstances seem to Force Subject to Take Considerable Responsibility in Home, Tho He Is Not Interested in It, or He Wants to Carry Out Other Plans:
Adjustive: Makes the best of it. Or, if he feels he cannot give the help, is able to go about his own affairs without guilty feeling. Tries to find some other solution. 19. a b c
Non-adjustive: Doesn't take the responsibility, but feels he should—worries, feels guilty. Resentment, but compels self to carry the burden, trying to suppress conflicting personal interests; does not try to plan any other solution. d
Success in Later-adolescent Problem of "Leaving the Nest" and Setting Up His Own Establishment
Satisfactorily done. Free from homesickness, and dependence on home. 20. a b
(Hasn't left home.) c
Weeps when thinks of leaving home; cannot bear notion of permanent home away from parental roof. After leaving home, so homesick that he developed a nervous breakdown necessitating return home. d
Response to Later-adolescent Task of Making Own Decisions and Formulating Own Standards
No scruples about living own life in own way. Willing to receive parental advice, but independent of it. Confident of own decisions. 21. a
Gradual breaking away, but still rather dependent. Feels bound by parents on some decisions, e. g., marriage. Feels their control only in things they will know about. b
Bewildered by task of making own decisions. Keeps mails busy with home. c
Attachment to parents keeps him from doing what he thinks is best. Accepts home standards and feels guilty if departs from them. Judges persons by what parents would think of them. d
Response to Disillusioning Experience Regarding Parents—Their Honesty, Fairness, etc.
E. g., deep depression; loses all confidence in parents and in everyone. 22.
Details:

RELIGION AND STANDARDS	Child-hood	Early Teens	Recent or Now
Type of Community in Which Subject Was Brot up			
(Rural, conservative, cosmopolitan, etc.) 1.			
***Parent's Attitude toward Religion (Church)**			
Sincerely religious; religion important factor in their lives. 2. a			
Passive interest of average church-member type. b			
Indifferent. c			
Opposed; against religion as ordinarily understood. d			
***Parent's Tendency toward Religious Conservatism**			
Strongly fundamentalist. 3. a			
Average conservative position. b			
Of liberal theology. c			
Trained their children to examine and test beliefs "in light of reason." d			
***Parent's Tendency to Get Emotional about Differing Points of View—Moral, Religious, Political**			
Dogmatic, arbitrary, angered by disagreement. 4. a			
Likely to be upset or uneasy in presence of differing ideas. b			
Accept change or differences in general, aside from one or two pet ideas. c			
Tolerant of change; interested in differing points of view. d			

RELIGION AND STANDARDS	Child-hood	Early Teens	Recent or Now
Parent's Interest in Subject's Religious Education			
Very much concerned, thot it of utmost importance. 5. a			
b			
Largely indifferent. c			
Actively opposed. d			
Amount of Pressure Used in Carrying Out the above Concern			
Forced subject to go whether he wanted to or not. 6. a			
Requested or urged it. Said it would please them. b			
c			
Made it a pleasure to go; or left decision in his hands. d			
***Subject's Attitude toward Religion (Church)**			
His consuming passion, his life centers in it. 7. a			
Quite interested, enjoying public worship, communion, etc. b			
Interested in church only as a social meeting place. c			
Goes only when must. d			
Subject's Consciousness of Religious Experience			
Strong sense of presence of God. Inner conviction. Ideal for self built on what the Lord expects of him. 8. a			
Feels there is some great Power. God rather an abstract concept. b			
"Not very religious." Skeptical; intellectual difficulties. c			
No consciousness of God or interest in religion. d			

RELIGION AND STANDARDS	Child-hood	Early Teens	Recent or Now
Subject's Feeling of Need for Religious Security			
Strong desire for feeling of security and peaceful sense of presence of God. 9. a			
Insistent need to work out a well-ordered philosophy of life. b			
Scarcely gives the matter a moment's thot. c			
d			
Experience of Conversion			
Sudden emotional conversion (at what age or ages .....). 10. a			
Pretty definite conversion, but of the gradual change type. b			
c			
No such experience. d			
Tendency toward Being Conscientious and Dutiful			
"Goody-goody." Very conscientious, meticulous in carrying out tasks. Cannot go out for a good time, e. g., without guilty feeling the he should be studying. 11. a			
b			
c			
"Bad-boy." d			
Tendency toward "Idealism"			
Very idealistic. Friends say he has impossible standards. 12. a			
b			
c			
d			
***Sense of Sin and Guilt**			
Marked feeling of guilt—done things "very wrong" that he would have difficulty in acknowledging even to self. 13. a			
Considerable feeling of guilt—done things he would have difficulty in acknowledging to others. b			
Occasional qualms of conscience. c			
No sense of sin or guilt. d			
Propagandist Tendency			
Strong reforming spirit. Serious minded, carrying world's burdens on shoulders. 14. a			
b			
c			
Complacent, indifferent. d			
Tendency toward Open-mindedness, Tolerance			
Esteemed an open-minded person (low gross-prejudice score on Watson Test of Public Opinion). 15. a			
b			
c			
Considered prejudiced, partisan, and opinionated (large gross score). d			
Type of Prejudices (Based on Analytical Scores on Watson Test)			
Economic. 16.			
Theological.			
Moral.			

RELIGION AND STANDARDS	
Response to Difficult Situation: Difference with Parents over Religious Views, Standards, etc.	
Adjustive: Does not emphasize the differences. 17. a	
b	
c	
Non-adjustive: shocks them, enjoys hurting them. d	
Response to Difficult Situation: Sense of Sin, Many Divergencies from Own Ideals, Strong Impulse to Be Logical and Consistent with Own Standards, to Live Out Ideals Literally—but Having Great Difficulty in the Attempt	
Adjustive: re-examining ideals, harmonizing them with what is possible, or dispensing with them. 18. a	
b	
c	
Non-adjustive: Carrying out measures for self-discipline, without success. Feels "no good," "weak-willed." d	
Response to Later-adolescent Experience of Encountering New Religious Beliefs	
No conflict, welcomed change—rather enjoys the recurring periods when old ideas seem no longer adequate and new conceptions must be worked out. (Low prejudice score on religious questions in Watson test.) 19. a	
Some shock, but transition is made. b	
Trying to avoid transition. c	
Tremendous conflict, trying to hold on blindly to childhood religion.	
Resents attacks on religion; or	
Delights in attacks on religion, making strong emotional swing away from past. (Strongly prejudiced on religious questions in Watson tests.) d	
Response to Encountering New Moral Standards and Conceptions	
Adjusting standards in light of reason; standard changing as intellectual viewpoint changes (Low Watson score on moral questions.) 20. a	
Some change in attitudes or behavior, but with qualms of conscience. b	
c	
No attempt to adjust—tries to cling to childhood standards without investigating their basis. Or, goes to the opposite extreme in breaking away from all standards. (Large Watson score on moral questions.) d	

SEX DEVELOPMENT	Mother			Father		
	Child-hood	Early Teens	Recent or Now	Child-hood	Early Teens	Recent or Now
*Parent's Attitude on Sex in General						
Accepted it without embarrassment as part of life. 1. a						
Somewhat embarrassed and inhibited. b						
Disapproved and disliked sex. c						
Seemed to abhor sex expression of any sort, dancing, e. g. d						
Parent's Method of Carrying out Conviction about Sex						
Handled the problem "wisely and unemotionally." 2. a						
Did not try to handle the problem. b						
Tense and emotional lectures. c						
Severe threats and punishments. d						
*Attitude of Parents toward Subject's Acquiring Sex Information						
Told him willingly whatever he wanted to know. 3. a						
Talked under sense of duty, with strain. b						
Said nothing, or postponed discussion — embarrassed or annoyed. c						
Took every precaution possible lest he acquire such information. d						

SEX DEVELOPMENT	Child-hood	Early Teens	Recent or Now
*Respectability of Sources of Sex Information			
From teachers, parents, classes. 4. a			
From "respectable" associates; from medical books, watching animals, etc. b			
From rather disreputable sources; certain amount of secrecy and feeling of naughtiness. c			
From "dirty stories," and "naughty children." d			
Type of Experience or Experimentation in Sex			
1. *Solitary versus social*			
Solitary exploration, masturbation. 5. a			
b			
Mutual exploration, masturbation. c			
(Attempted) intercourse. d			
2. *With same sex or opposite sex*			
Exclusively with same sex. 6. a			
Primarily with same sex. b			
Primarily with opposite sex. c			
Exclusively with opposite sex. d			
3. *Secret-illicit versus open and above-board*			
Secrecy preserved, no one ever knew. 7. a			
Caught or seen. b			
Confessed, "owned up." c			
No thot of its being an illicit matter. d			
4. *Experiences as object of sex-aggression*			
Object of exposure. 8. a			
Stimulated, masturbated by older person. b			
Sexual advances made by minister, by married man, etc. c			
Advances made by parent. Incest. d			
5. *Impression made upon him by sex-aggression*			
"Horrible experience," stayed with him for years—never dared mention it to anyone. 9. a			
b			
c			
Interested or amused. d			

SEX DEVELOPMENT	Child-hood	Early Teens	Recent or Now
Amount of Sex Curiosity Shown			
Very curious, collecting information; verifying or planning to verify it. 10. a			
Passive curiosity, afraid or ashamed to follow it up (feigned indifference). b			
Not very curious. c			
Apparently no curiosity or interest. d			
Ability to Ask for What He Wanted to Know			
Carried all questions openly to persons competent to answer, no embarrassment. 11. a			
Talked in guarded or impersonal sort of way with trusted persons. b			
Able to talk somewhat if others took the aggressive. c			
Pondered in private—too afraid or ashamed to talk to parents or other children. d			
Amount of Information Possessed			
Very fully informed. 12. a			
Considerable body of information. b			
Very incomplete information—some slight preparation for physical sex development, e. g. c			
No information. Totally unprepared for sex developments. d			
Accuracy of Information			
Entirely accurate and scientific. 13. a			
b			
c			
Highly erroneous, e. g., belief that birth takes place thru the navel, that kissing produces babies, etc. d			
***Subject's Response to Parental Attitude on Giving Sex Information**			
Thot they knew best, agreed with their point of view. 14. a			
b			
Felt they were embarrassed, weren't handling the situation fairly. c			
Lost confidence in and respect for parents. Resentment. d			
***Response to Sex Information Acquired**			
It seemed quite natural; shed new light on life. 15. a			
Temporarily disturbed. b			
Thought it rather boorish and degrading. c			
Shocked, repulsed, made sick. Tried to forget it. d			
***Subject's Attitude toward His Sex Development and Practices**			
Realized going thru natural, customary experiences. 16. a			
No feeling of wrong-doing, except wanting to keep behavior secret, especially from parents. b			
Upset or ashamed. c			
Feels wicked, depraved, marked out from others—happiness ruined, hopes for future gone, polluted for life, etc. d			
Thumb-sucking History			
Persistent, great problem, continued till..... 17.			
Bed-wetting History			
Persisted till..... 18.			

SEX DEVELOPMENT
Success in Gaining Objectivity toward Episodes in Childhood Sex Development
Interested and amused; does not mind talking about them. 19. a
b
Still rather worried about them, without adequate cause. c
Unwilling to recognize that such events ever happened. Great reticence, embarrassment, guilt in retelling early childhood experiences. d
Success in Readjusting Earlier Sex Standards to Changing Social Attitudes on Sex
Changing both practice and conscience. 20. a
Changes practice, but cannot change deep feelings; or change in convictions, but not in practice. b
c
d
Response to Later-adolescent Problem of Working out Some Sort of Satisfactory Adjustment to Sex Feelings and Urges
1. *Amount of sex activity carried on*
"Heavy petting," masturbation, mutual masturbation; intercourse. 21. a
Mild petting, holding hands, kissing, close dancing. b
No conscious sex feelings—likes to pet and care for babies. Willing to dance, but not "that kind" of dancing. c
Strong revulsion or opposition to any form of dancing, to any physical contact with opposite sex, to any sex activity. d
Engaged in under What Circumstances:
With most anybody who is sexually interesting .... 22.
Only when real affection is present.....
Only with fiancè.....
Only within marriage.....
2. *Response to sex or sex feelings*
Much enjoyed, great release and pleasure. No shame or aversion. 23. a
Toleration of sex behavior, with some shame. b
Feels such emotional excitement enslaves one, "sex ought to be controlled, not indulged," says, "How could one ever have respect for a person who had done things like that," referring to petting and masturbation. c
Anything sexual is disgusting, beastial. d
3. *Satisfactoriness of present sex adjustment*
Very satisfactory, problems largely solved. 24. a
As satisfactory adjustment as his age and circumstances permit. b
c
Very unsatisfactory—severely upset by practices or troubled by unsatisfied longings. d
Response to This Difficult Situation
Making intelligent efforts to bring about adjustment..... 25.
Worrying, depressed. ....

LOVE AFFAIRS: CRUSHES AND HETEROSEXUAL DEVELOPMENT		Childhood	Early Teens	Recent or Now
Parental Attitude toward Subject's Crushes	1.			
Tolerant, amused attitude.	a			
Thot them very foolish and silly.	b			
Strongly opposed—moved across continent to break up attachment.	c			
	d			
***Opportunity for Contact with Persons of the Opposite Sex**				
Lots of opportunity—brought up in association with opposite sex.	2. a			
Few opportunities—in school with same sex only, e. g.	b			
Practically no opportunities—parent was about the only person of opposite sex around.	c			
Brought up with same sex exclusively.	d			
***Physical Attractiveness to Opposite Sex**				
Obviously attractive; always plenty of admirers.	3. a			
Attractive enough, apparently.	b			
Rather unattractive, but not "impossible."	c			
Decidedly and obviously unattractive.	d			
Attitude of Parents toward Offspring's Love Affairs				
(Underline any.)				
Interested and co-operative.	4.			
Favor his marriage, tho not urgent.				
Interested only in getting her married.				
Interested only in having offspring stay home with them, permanently unmarried.				
Put his career above marriage.				
Discourage his interest in marriage.				
Feel that no one is good enough for *their* child.				
Leave the question entirely up to him.				
Do not take his affairs seriously. Tease and make fun.				
Oppose his choices.				
Advocate some counter-choice whom he does not find attractive.				
Supervise his dates; oppose all dating till age 18, etc.				
Move heaven and earth to stop affair of which they do not approve. Threaten to disown him, etc.				
Subject's Response to Strong Parental Attempt to Influence His Love Affairs				
Breaks off engagement to please them. Picks the type of person of whom they would approve, avoiding others.	5. a			
	b			
Carries out his plans as against theirs, but feels the strain of disagreeing.	c			
Does not confide in them regarding his affairs.	d			

LOVE AFFAIRS		Childhood	Early Teens	Recent or Now
***Frequency of Crushes (Strong Emotional Attachments) on Persons of Same Sex**				
Always someone.	6. a			
Many crushes, usually some strong attachment.	b			
Only one or two.	c			
Never had any.	d			
Violence of Crushes				
"Just dotes" on crushee, cannot think of anything else.	7. a			
Ideals and plans for life strongly influenced.	b			
Warm and fine friendships, but not violent.	c			
	d			
***Tendency toward Overt Expression of Affection toward Object of Crush (of Same Sex)**				
No concealment of feelings—gives presents, is with crushee at every opportunity, seeks cuddling, etc.	8. a			
Makes partially disguised advances—planning hikes, etc.	b			
Waits for crushee to take the initiative. Flustered in his presence, trying to make good impression.	c			
Worships from afar. Conceals feelings.	d			
Extent of Specifically Sexual Manifestations in These Emotional Friendships				
Simulated intercourse; employed mutual masturbation.	9. a			
	b			
	c			
Marked demonstrations of friendliness only.	d			
Attitude toward Tendency to Marked Emotional Friendships with Same Sex				
Very happy relation, no remorse.	10. a			
Somewhat disturbed, but thinks the adjustment pretty satisfactory.	b			
Distinctly unsatisfactory; doesn't want it to continue.	c			
Perfect horror of it—feels abnormal, afraid people will notice.	d			
***Subject's Interest in Going with the Opposite Sex**				
Enjoys it greatly. Finds opposite sex as interesting or more interesting than own sex.	11. a			
Considerable interest; goes with opposite sex about average amount.	b			
Has to force self to go with opposite sex; feels ill at ease, stiff, formal, with nothing to say.	c			
No conscious interest.	d			
***Frequency of Love Affairs with Opposite Sex**				
Great many—always someone.	12. a			
Quite a few.	b			
Very rare.	c			
None.	d			
Ability to Express Physical Affection toward Opposite Sex				
Longs for it, very fond of it—no hesitancy under appropriate conditions.	13. a			
Rather bashful and backward, but much interested.	b			
	c			
Cold, repulsing toward opposite sex. Unable to feel physical affection, tho intimate with persons of opposite sex.	d			

LOVE AFFAIRS	Child-hood	Early Teens	Recent or Now
Amount of Urge toward Marriage			
Wants marriage above all things. Would give up present work plans in a minute for the right person. 14. a			
Marriage seems desirable and best for fullest life—much interest in it. b			
Rather hesitant about marriage lest it come out badly or lest it interfere too severely with work and career—slight interest. c			
More interested in career than marriage. Opposed to marriage, doesn't want to settle down, doesn't want responsibilities of home. d			
Summary of Special Inhibitions or Problems in Love Adjustment (Underline Any) 15.			
Obsessed by romantic idea of love as found in novels.			
Daydreams about loves, afraid of real affairs. Makes great heroes of persons adored.			
Has highly idealized picture of kind of mate wanted, and cannot find anyone to fill it.			
Tends to fall in love with persons who are quite indifferent to him, perhaps "way above" him.			
Tends to fall in love with married persons.			
Tends to feel real passion only when the loved one is hopelessly gone to someone else.			
Interested in prospective lovers only if there is keen competition for them.			
Loses interest in prospective lovers as soon as they "fall for" him.			
Pals beautifully with opposite sex, but does not fall in love.			
Finds it difficult or impossible to "make love"—inhibited in physical expressions.			
Can't seem to get interested in opposite sex.			
Many broken-off love affairs.			
Girl finds herself so interested in her father that she has no interest in other men.			
Girl wants to compete with her men friends, rather than loving them.			
Girl is attracted to men who obviously need mothering.			
First love before puberty has colored choices ever since.			
Love "conquests" largely a matter of ego-glorification.			
Boy finds himself attracted toward women who remind him of his mother.			
He is so bound up with his mother that he has little interest in other girls.			
He cannot seem to be attracted by "nice, proper" girls, but is interested rather in girls whom he can "pick up."			
Afraid of being tied down by any sort of strong attachment.			
Has particular fears of sexual relations: of pain in intercourse, of impotence, of having children.			
Falls desperately in love with persons of own sex:			
with same sex only;			
or, along with persons of opposite sex.			

LOVE AFFAIRS	Child-hood	Early Teens	Recent or Now
*Response to Frustrated Love Affair			
Disappointed, but able to get over the affair and to find someone else. 16. a			
Considerable grief, but able to think and talk about it. b			
Could not think or talk about it for months. c			
Terrible shock, lasting for years—life will never be the same. d			
Response to Difficult Situation: Obviously Unattractive to the Opposite Sex, or Incapacitated for Marriage			
Adjustive: Establishing a fairly satisfactory compensation — emotional friendship relation; finding outlet by loving children or associates; high ego-satisfaction out of success. 17. a			
Learning how to increase attractiveness to opposite sex. b			
c			
Non-adjustive: Daydreams extensively about "home and marriage." Depressed and morose. d			
Response to Difficult Situation: Unable to Fall in Love Yet Apparently Wanting to			
Adjustive: 18. a			
b			
c			
Non-adjustive: Taking stop-gap jobs, vaguely hoping someone will turn up. Says is too busy to think about it; anyhow all marriages come out badly. Denies that interest still continues. d			
Response to Difficult Situation: Unmarried at Age 30 and No Prospects			
Adjustive: Making intelligent efforts to find a mate.			
Satisfactory sex and love adjustment achieved thru homosex, auto-erotism, work with children, etc.			
Feels has outgrown need of direct sex expression.			
Wants marriage, but the freedom and expression desired may come thru many channels—does not feel defeated and barren without marriage. 19. a			
b			
c			
Non-adjustive: Lonely, wishes had married. Undercurrent of sadness increasing.			
Represses daydreams about marriage.			
Highly unsatisfied, annoyed by work, very unhappy. d			

PHYSICAL DEVELOPMENT		Child-hood	Early Teens	Recent or Now
***Physical Fitness**				
Unlimited physical energy, "perfect specimen," etc.	1. a			
O.K. physically, not exceptional.	b			
Below par.	c			
Sickly, delicate.	d			
Physical Disadvantages:	2.			
(Underline any.)				
Crippled or lame; cross-eyed, serious eye trouble; skin-disease or disfiguring scars; hard of hearing; ugly features; over-weight; under-weight; small stature; glasses; left-handed; excessively youthful appearance; others:				
Ability in Physical Sports				
Perfectly competent, an athlete.	3. a			
Some ability, e. g., a good hiker.	b			
Rather awkward and incompetent.	c			
Unable to take part in active games.	d			
Developmental Physical History	4.			
(See medical report.)				
Summary of main difficulties:				
Presence of stuttering, stammering, tics, St. Vitus dance, etc.				
Details, if any near relative was insane, epileptic, feeble-minded, drunkard, "queer," extremely temperamental, genius, suicide.				

INTELLECTUAL DEVELOPMENT		Child-hood	Early Teens	Recent or Now
***Intellectual Accomplishment in School**				
Top of class; skipped grades.	1. a			
Above the average.	b			
Has to work real hard to keep up to the average.	c			
Somewhat retarded, low grades.	d			
***Parental Attitude toward His School Work**				
Set great store by his school success; demanded that good grades be gotten.	2. a			
Interested and encouraging, expected good work, pleased with success, but did not emphasize it.	b			
Indifferent.	c			
Opposed his "fool notion of more schooling;" insisted on his leaving school and getting to work.	d			

PHYSICAL DEVELOPMENT	Child-hood	Early Teens	Recent or Now
*Subject's Interest in Physical Success			
Puts great store in winning, wants to be known as athlete. Proud of being "healthiest of the lot." 5. a			
Some interest, but hardly a major interest. b			
Little concerned in games and sports. c			
Complete lack of interest. d			
Response to Losing in Games, Failing to Make Teams, etc. 6.			
Despondent as tho his whole life had depended on winning.			
Response to Difficult Situation, "Baffling Physical Disability"			
Adjustive: Having everything possible done to remove the disability.			
Accepting status of "physically impaired person," learning to live with the handicap. 7. a b c			
Rather enjoys being looked after as semi-ill person. Tends to imagine he has more ills than he actually does have.			
Non-adjustive: Unwilling to recognize his state, and make allowances for it. d			
Response to Disadvantageous Physical Appearance			
Adjustive: No inferiority complex, altho feeling the handicap. 8. a b c			
Non-adjustive: Very sensitive, grieves over his condition, avoids society, etc. d			
Response to Inability in Sports			
Adjustive: The Roosevelt comeback—taking regular training in order to develop skills. Enjoys being unusually strong or having great endurance.			
Or, if these are impossible, accepts the situation and turns attention to other interests. 9. a b c			
Non-adjustive: Grieves over physical inferiority.			
Dreams about physical supremacy.			
Denies interest in physical affairs. d			

INTELLECTUAL DEVELOPMENT	Child-hood	Early Teens	Recent or Now
*Eagerness for School or Intellectual Success			
Particular efforts to get grades, works very hard to avoid disappointment. Feels failure would be tragic. 3. a			
Works for grades primarily on account of family pressure. b			
Likes intellectual work, not interested in the grades aspect. c			
Content to "get by." d			
Response to Consciousness of Possessing High Intelligence Quotient			
Not conceited about it. 4. a b c			
Sets up as intellectual snob, claiming that other activities, not excelled in, are of no importance. d			
Response to Difficult Collegiate Situation: Somewhat Handicapped Intellectually			
Adjustive: adapts ambitions to this limitation. 5. a b c			
Non-adjustive: tries to reassure self that he has as good mind as anyone; that anyhow perseverance is what counts.			
Longs for brilliant mind, feels inferior. d			
Response to Difficult Collegiate Situation: Encountering Much Keener Intellectual Competition Than in High School Where He Was Outstanding Pupil			
Adjustive: Reconciling his estimate of his own ability with the facts. 6. a b c			
Non-adjustive: Finds excuses for lack of expected success. Claims he is not interested in grades anyway. Feels intellectually no good; feels hopelessly inferior in presence of keen persons. d			

VOCATIONAL ADJUSTMENT		Childhood	Early Teens	Recent or Now
Father's Vocation:	1.			
Mother's Vocation:	2.			
Type of Parental Ambition for Subject's Career				
Want him to make a conspicuous success, to be a social somebody. High aims in general, not particularized.	3. a			
Sacrificial service—missionary or the like.	b			
Anything, so long as he is happy in it.	c			
Would be perfectly content if he simply stayed at home.	d			
Specific Vocational Ambitions Urged by Subject's Parents:	4.			

VOCATIONAL ADJUSTMENT	Child-hood	Early Teens	Recent or Now
***Extent of Subject's Urge toward Fame**			
Wants to do something lasting that will cause him to be remembered after his death—to be great, famous in whatever he does. 5. a			
Wants to be held in high regard. b			
No idea of being out of the ordinary—wants to do work well, to enjoy life fully. c			
Seeks humble and obscure service. d			
***Interest in Public or Private Life**			
Wants to exercise authority, organize, be executive—a master of men. 6. a			
To be in the bustling world—business, salesmanship. b			
To teach or work intimately with small groups. c			
Quiet studies—home and children. d			
***Interest in Doing Things Vs. Imagination**			
Feels happiest when working busily with persons and things—usually dislikes the world of contemplation. 7. a			
Prefers working busily with persons and things, but also enjoys contemplation and imagination. b			
Prefers contemplation and imagination, but also enjoys the active world. c			
Feels happiest when dreaming dreams, reading philosophy or theology, enjoying art—withdrawn from active world. d			
Interest in Security			
Wants safe economic and social establishment—"settled." 8. a			
b			
c			
An adventurer, always taking risks. d			
Interest in New Experience			
Great interest in finding out new things, doing creative work. 9. a			
b			
c			
Content with routine type of life. d			
Presence of Service Motive			
Ideals of service and self-sacrifice. 10. a			
Anxious to perform some real service where it counts. b			
Little concern for "service;" interested in getting real satisfactions for self. c			
Chief concern is desire to "get ahead," make his "pile," or his reputation. d			
***Objectivity about Own Abilities and Performance**			
Able to discriminate his abilities and limitations; knows when he has done best, when he has slumped. 11. a			
Pretty objective on the whole. b			
Considerable uncertainty—can't judge his own achievements. c			
Persistently overestimates own abilities. d			
If He Could Go into Any Vocation He Might Choose, Regardless of Limiting Circumstances, He Would Choose .... 12.			
Most Probable Vocation....			

VOCATIONAL ADJUSTMENT
Success in Realizing Vocational Plans
In vocation wanted, or headed toward it. 13. a
Pretty well satisfied, reconciled to job, altho not doing precisely what he wanted. b
In stop-gap work. Cannot find what he likes and can settle down to. c
Sharp conflict between present work and ideal (e. g., wants to be actress—is actually school teacher). Frustrated in cherished vocational plans. d
Response to Difficult Situation Often Faced by Later-adolescents—the Necessity of Revising Lofty Ambitions, Bringing Air Castles to Earth
Adjustive: Reconciled to limitations, or actually overcoming them.
In the work wanted, or headed toward it. Prospects satisfactory. 14. a
b
c
Non-adjustive: Never satisfied, always wanting something better.
Tense, over-working to reach impossible ambitions.
Wandering from job to job.
Nervous breakdown. d
Response to Difficult Situation—Lack of Success or Adjustment in Present work
Adjustive: Trying to remedy the causes of dissatisfaction—making well-founded plans for change. 15. a
b
(Wants better "opportunity"—new fields.)
c
Non-adjustive: Gives up present work impulsively.
Pictures another work as more desirable, uncritically; wants to shift to it forthwith. Unable to recognize the real source of failure. Becomes a vocational wanderer. d
Response to Later-adolescent Problem of Taking Up Adult Vocational Responsibilities
Adjustive: 16. a
b
c
Non-adjustive: Knows is capable, but is afraid of the actual situation.
Life-work decision becomes great conflict.
Rather remain an irresponsible student.
Tries to avoid facing the problem—continues on in training indefinitely. d

SOCIAL: ADJUSTMENT IN COMRADE GROUP, STATUS IN COMMUNITY, PUBLIC RECOGNITION	Child-hood	Early Teens	Recent or Now
*Family Status in the Community			
High status, "privileged." Special distinctions, more intellectual, or wealthy, or professional than others 1. a			
Respected, "good family," no special pretensions nor feelings of inferiority—ordinary citizens. b			
Somewhat disadvantageous, "under status." c			
Distinctly unfavored or disadvantageous. d			

SOCIAL	Child-hood	Early Teens	Recent or Now
*Opportunity for Companionship with Persons of Own Age			
Many playmates and friends available. 2. a			
Enough. b			
Very few. c			
Lived in adults' world (apartment hotel, e. g.) impossible to associate with persons of own age. d			
Amount of Companionship			
Lots of it, chased all around the neighborhood. Gangs, cliques, etc. 3. a			
b			
c			
Played with no other children. d			
*Treatment from Companions and Associates			
Accepted, friendship sought, admired. 4. a			
Accepted as one of the crowd, kidded somewhat. b			
Kidded and teased more than the average. c			
Called unpleasant nicknames (sissy, coward, 'fraid cat, cry-baby). Plagued, annoyed, teased, bullied. d			
*Interest in Companionship			
Loves to have people around, mingles freely, seeks companionship. 5. a			
Reads or plays by self, but is usually ready to quit in a moment to be with others. b			
Usually prefers solitude, holds self aloof. c			
Hermit tendency—has to be forced to go out with others. d			
*Tendency toward Hyper-sensitivity to Opinions of Others			
Feels independent and self-confident; able to stand against all opposition for convictions. 6. a			
Sensitive to other's point of view, but independent. b			
Tends to defend decisions from what people might say. Unable to criticize others or to sustain decisions unfavorable to them. c			
Can talk freely only with those he knows agree. Acts with people as tho he felt he was about to be punished. d			

SOCIAL		Child-hood	Early Teens	Recent or Now
***Freedom from Hyper Self-consciousness**				
Enjoys performing in public; "the life of the party." 7.	a			
Only slightly bothered by self-consciousness.	b			
Especially hard to do things while people look on—great anxiety over performing in public. Blushes easily.	c			
Never lets self get into center of attention. Cannot speak in public; goes over trivial social incidents a thousand times. Has feeling that people know more about him than he wants them to.	d			
***Tendency to Feel Markedly Different from Associates**				
Feels markedly superior, on account of family status, clothes, talents, etc. 8.	a			
Feels somewhat superior.	b			
Does not think of self as being particularly different.	c			
Feels markedly inferior, on account of crudeness, clothes, disabilities, family misfortunes, etc.	d			
***Tendency to Exercise Authority, to Be Domineering**				
Must be complete boss of whatever he is doing. 9.	a			
Antagonistic and perverse in presence of domineering persons.	b			
Not irked by working under others.	c			
Self-effacing, hates to be noticed.	d			
***Subject's Enjoyment of Social Intercourse**				
Greatly enjoys social life, "good mixer," soon feels at home in any group, gets up parties, "bats," etc. 10.	a			
Moderate enjoyment.	b			
Doesn't feel at home in social situations —sits in the corner at parties; uncomfortable.	c			
Persistent shyness, timidity, cringing, feeling of social inability—shuns society.	d			
***Amount of Close Understanding Friendship**				
Close and dear friends—talks over own problems with them. 11.	a			
Fairly intimate friends.	b			
None very intimate—frequently feels that no one understands.	c			
Feels isolated; if feelings are hurt, goes off by self.	d			
Degree of Social Ambitiousness				
High aims—to be superior to everyone else; to get offices and honors, or to be well-known because of great achievement. 12.	a			
Enjoys making impression, getting recognition, but does not feel it as a strong major craving.	b			
	c			
Indifferent to social success—utterly satisfied with humble, obscure status.	d			

SOCIAL		Child-hood	Early Teens	Recent or Now
Success in Problem of Getting Along with Others				
Always gets along well with others, whether working under or over them. 13.	a			
	b			
Quarrelsome, likely to get into scraps. Rough on others when irritated. Can't seem to understand and handle others.	c			
Always getting into disputes, fights, or the like.	d			
***Success in Obtaining Social Recognition**				
Prominent offices, popular, (they are "crazy" about him). 14.	a			
Fair degree of recognition.	b			
Feels left out, unnoticed; has no hold on group.	c			
Socially a "nobody."	d			
Response to Disadvantageous Social Status or Background of Which He Is Distinctly Conscious				
Adjustive: 15.	a			
	b			
	c			
Non-adjustive: Becomes recluse; leaves school.	d			
Response to Consciousness of Being Queer, Peculiar, Different				
Adjustive: 16.	a			
	b			
	c			
Non-adjustive: Compensation sought in imagined intellectual superiority; reads high-brow literature; poseur.	d			
Response to Presence of Social Inhibitions or Other Traits that seem to Prevent His Making Friends				
Adjustive: Seeks help on the inhibitions and traits. Tries to develop social abilities. 17.	a			
	b			
	c			
Non-adjustive: Mopes. Feels blue and lonely. Gets sarcastic when people try to be friendly.	d			
***Response to Criticism, Razzing, Etc., from Others**				
Pretty objective and impersonal; able to laugh at self with others. Able to admit mistakes, apologize. 18.	a			
Sometimes gets mad or fussed.	b			
Likely to be upset, at least temporarily. Likely to be hurt.	c			
Gets terribly upset, suffers intensely, likely to get into the dumps, to feel no good. May get horribly mad.	d			
Response to Failure to Achieve Recognition Much Craved (e. g. misses out on fraternity election, office sought, dates, etc.)				
Adjustive: 19.	a			
	b			
	c			
Non-adjustive: Says is really not interested, tho obviously is (sour grapes).	d			

AGE_____ KEY INITIALS (use e. g. the initials of some friend)_____

SEX_____ Or, NAME _____

RACIAL DESCENT _____ And ADDRESS _____

GENERAL EMOTIONAL ADJUSTMENT, HAPPINESS	Child-hood	Early Teens	Recent or Now
Presence of "Nervous" Physical Symptoms (Probably the Normal Physiological Results of a Persistent Condition of Emotional Disturbance)			
(Underline any.)			
Symptoms absent, sleeps well, etc. 1.			
Practically no nervousness.			
Sleeps poorly; morning lassitude.			
Tired most of the time without adequate organic explanation.			
Eyes often pain, so that he cannot work.			
Things sometimes seem to swim and get misty before his eyes. Fits of dizziness.			
Bad headaches, or pressure in or about head.			
Bad nightmares.			
Walks or talks in sleep.			
Cries easily.			
Afraid is going to have a nervous breakdown.			
Nervous breakdown.			
Lost memory for a time.			
Been partially paralyzed, deaf, dumb or blind for a time without physical explanation.			
Severe phobias or compulsions.			
Presence of Distressing Fears or Other Bothersome Traits			
(Underline any.)			
Often frightened in middle of night. 2.			
Dreams of robbers.			
Fear of being hypnotised.			
that someone is trying to do him harm.			
of going on the water.			
of crossing a bridge.			
of being seduced or attacked.			
that someone is following him at night.			
of fire.			
of going insane.			
of insane persons, "madmen."			
of sitting in small room with doors shut.			
of having to cross a wide deserted street or a large open space.			
of falling or jumping from a high place.			
during thunderstorms.			
of certain animals—snakes, etc.			
of operations or physical pain.			
Upset by the sight of blood.			
by unpleasant smells.			
by slimy, sticky objects.			
Gets a sort of fiendish pleasure out of teasing a person till he is much upset; out of being brutal and cruel.			
Sometimes feels a strong desire to steal things, such as....			
Is a wanderer; cannot settle down to anything for long.			
Finicky about food.			
Picks nose.			
Bites fingernails.			

GENERAL EMOTIONAL ADJUSTMENT, HAPPINESS	Child-hood	Early Teens	Recent or Now
***Subject's Feeling of Satisfaction and Happiness in Life**			
Happy, well-adjusted, contented. 3. a			
Pretty well satisfied. b			
Occasional depressions and periods of marked unhappiness. c			
Low-spirited most of the time—life seeming to have no meaning. d			
***Customary Subjective Attention Level**			
No problems of lack of concentration, will power, ability to make up mind. 4. a			
Occasional difficulties. b			
Anxious, worried about "things of no real importance." Hard to concentrate, to decide things. Feels need of "strong will." Has to force self to keep on working. Lets work pile up. c			
Feels acutely confused; doesn't know what to do next, unable to work, things somehow don't seem real. d			
***Customary Level of Emotional Tension, Nervousness**			
Calm, works without strain. Not easily upset. 5. a			
Usually calm, tho rather easily upset. b			
Usually keyed up, works under high nervous tension. c			
Jumpy, fidgety, easily annoyed by noises, disturbances, etc. Irritable. d			
Tendency toward Fluctuations of Mood			
Exceptional constancy of mood. 6. a			
b			
c			
Severe "ups and downs." d			
Tendency toward Temper Spells			
Never loses temper, continuous good nature. 7. a			
b			
Subdued spells of rage—sulky, resentful. c			
Gets so angry or sulky he cannot talk. "Tantrums." d			
Subject's Habitual Method of Dealing with These and Other Difficulties, Lacks, or Weaknesses			
Adjustive: Faces the situation objectively; seeks the best counsel available. 8. a			
b			
Runs from one cult to another. Tries to reassure self or discipline self. Tries to pull self up by bootstraps—says "I must get after myself, must conquer that, must force myself, etc." c			
Non-adjustive: Tries to forget problems instead of stating them.			
Worried, depressed, giving up, feels unable to seek help. d			

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